

Comprehensive Review of the Northwest Energy System
Final Report

Toward a Competitive Electric Power Industry for the 21st Century

December 12, 1996

PREAMBLE

The 20 members of the Steering Committee of the Comprehensive Review of the Northwest Energy System have worked for 11 months to develop the recommendations contained in this final report. These recommendations represent a consensus of 13 of the 14 voting members of the Steering Committee, a consensus that has been achieved only by compromise and sacrifice on the part of each of the members on the Committee. The 14th voting member acknowledges the significant progress made in many areas but does not believe that sufficient progress was made on issues related to fish and wildlife to constitute a real consensus. His views are presented in Appendix A.

We, the members who voted with the majority, support the report and will work to educate and persuade others, but our support here does not commit all of the groups we represent. These compromises, as difficult as some may find them, are worth making for a simple reason: we have more to lose as a region than we have to gain as disparate interests.

There is still much work to be done. This final report is specific in some areas and general in others. More detail and further refinement will be required to convert these recommendations into the contracts, legislative bills, rules and policies that will implement them.

As regional interests work further on these restructuring initiatives, there are bound to be disagreements and new issues to be resolved within the outlines of these recommendations. However, we believe that the principles outlined here must remain if any regional consensus is to be hoped for. With a consensus position, the Pacific Northwest has the best hope of retaining the benefits of the federal hydropower system and transitioning to a competitive electricity system that will maximize benefits for all consumers in the region. The work embodied in this report will not easily be replicated if the regional consensus is destroyed by unilateral actions of any party.

Finally, the Committee recognizes that electric utility restructuring is evolving rapidly and that efforts in Congress and the states almost certainly will change some of the assumptions underlying this report. Although our recommendations may not reflect the ultimate end-state of this restructuring, we nevertheless believe that it does reflect a workable outcome in itself and a very positive step in this process.

TABLE OF CONTENTS

PREAMBLE	ii
TABLE OF CONTENTS	iv
INTRODUCTION	1
WHY ARE WE DOING THIS?	1
<i>Without Regional Consensus...?</i>	2
THE COMPREHENSIVE REVIEW	3
SUMMARY OF RECOMMENDATIONS	4
FEDERAL POWER MARKETING – THE BONNEVILLE POWER ADMINISTRATION	4
COLUMBIA RIVER SYSTEM GOVERNANCE	5
CONSERVATION, RENEWABLE RESOURCES AND LOW-INCOME ENERGY SERVICES	6
CONSUMER ACCESS TO THE COMPETITIVE MARKET	7
TRANSMISSION	8
FUTURE POWER SYSTEM ROLE FOR A FOUR-STATE REGIONAL BODY	8
FEDERAL POWER MARKETING: THE BONNEVILLE POWER ADMINISTRATION – ADAPTING TO A COMPETITIVE ENVIRONMENT, PRESERVING THE BENEFITS OF LOW-COST HYDROPOWER FOR THE NORTHWEST	10
GOALS	10
BACKGROUND	10
RECOMMENDATIONS	11
<i>Summary</i>	11
<i>Disposition of Federal Power</i>	11
Priority for Subscriptions	13
Subsequent Subscriptions	14
Resale of Power	14
<i>The Exchange</i>	14
FISH AND WILDLIFE	14
OWNERSHIP BENEFITS FOR THE U.S. TREASURY	15
STRANDED COST	16
CUSTOMER ADVISORY COMMITTEE	16
BONNEVILLE IN THE COMPETITIVE MARKET	17
GOVERNORS’ TRANSITION BOARD	17
COLUMBIA RIVER SYSTEM GOVERNANCE	18
CONSERVATION, RENEWABLE RESOURCES AND LOW-INCOME ENERGY SERVICES – REFLECTING THE VALUES AND MEETING THE NEEDS OF NORTHWEST CITIZENS	19
GOALS	19
BACKGROUND	19
<i>Conservation</i>	19
<i>Renewable Resources</i>	20
<i>Low-Income Energy Services</i>	21
RECOMMENDATIONS	21
<i>Conservation</i>	22
Conservation was divided into two areas for action: local and regional conservation. Local conservation covers those actions designed to influence on-site consumer efficiency choices. Local conservation also includes low-income weatherization activities. Regional actions include the establishment of a regional technical forum and a non-profit entity to carry out conservation market transformation.	22
Local Conservation, Including Low-Income Weatherization	22
Regional Technical Forum	23
Market Transformation	24
<i>Renewable Resources</i>	24

Existing Renewable Resource Projects	24
New Renewable Resource Projects	24
Renewable Resource Research, Development and Demonstration	25
“Green Marketing”	25
<i>Low-Income Energy Assistance</i>	25
COLLECTING AND ALLOCATING THE FUNDS	25
THE BONNEVILLE POWER ADMINISTRATION’S ENERGY-EFFICIENCY SERVICES	27
<i>Recommendations</i>	27
CONSUMER ACCESS TO THE COMPETITIVE MARKET – ENSURING THE BENEFITS OF COMPETITION FOR ALL	30
GOALS	30
BACKGROUND	30
RECOMMENDATION	31
<i>Electricity distribution utilities</i>	32
<i>Electricity service companies</i>	32
<i>Policies for structuring competition</i>	32
Registration and licensing standards	32
Electricity bills	33
Balanced competition	33
Clarify regulatory authority	33
Incentives for reliability and efficient use of local distribution systems	33
<i>Transitional Steps</i>	33
Unbundled billing	34
Separation of local distribution from electricity services	34
Provide open transmission system access as soon as possible	34
Modify distribution utility service obligations	34
Promote development of retail electricity service providers	34
Opportunity to recover stranded costs	35
TRANSMISSION – OPEN-ACCESS HIGHWAY FOR COMPETITION IN GENERATION	36
GOALS	36
BACKGROUND	36
RECOMMENDATIONS	36
<i>Independent Grid Operator Responsibilities</i>	36
<i>Bonneville Power Administration</i>	37
<i>Governance</i>	37
<i>Wheeling for Retail Loads</i>	37
<i>Pricing of Transmission</i>	37
TRANSITION ISSUES	38
FUTURE POWER SYSTEM ROLE FOR A FOUR-STATE REGIONAL BODY	39
BACKGROUND	39
FUTURE ROLES	39
<i>Conservation and Renewable Resources</i>	40
<i>The Competitive Marketplace</i>	40
<i>Public Participation and Involvement</i>	41
FUNDING	41
APPENDIX A: DISSENTING OPINION	43
APPENDIX B: MEMBERS OF THE STEERING COMMITTEE	51

INTRODUCTION

WHY ARE WE DOING THIS?

The electricity industry in the United States is in the midst of significant restructuring. This restructuring is the product of many factors, including national policy to promote a competitive electricity generation market and state initiatives in California, New York, New England, Wisconsin and elsewhere to open retail electricity markets to competition. This transformation is moving the industry away from the regulated monopoly structure of the past 75 years. Today we are served by individual utilities, many of which control everything from the power plant to the delivery of power to our homes or businesses. In the future, we may have a choice among power suppliers that deliver their product over transmission and distribution systems that are operated independently as common carriers.

There is much to be gained in this transition. Electricity consumers are already benefiting from competition in a number of significant ways. Competition in the natural gas industry has helped lower the cost of electricity produced by gas-fired generating plants. Competition among manufacturers and developers of combustion turbines has contributed to the availability of less expensive, more efficient power plants that can be built relatively quickly. Surplus generating capacity on the West Coast combined with increasing competition among wholesale suppliers has reduced the price utilities must pay for power on the open market. Broad competition in the electricity industry that extends to all consumers could result in lower prices and more choices about the sources, variety and quality of their electrical service.

But, there are risks inherent in the transition to more competitive electricity services. Merely declaring that a market should become competitive will not necessarily achieve the full benefits of competition or ensure that they will be broadly shared. It is entirely possible to have deregulation without true competition. Similarly, the reliability of our power supply could be compromised if care is not taken to ensure that competitive pressures do not override the incentives for reliable operation. How competition is structured is important.

It is also important to recognize the limitations of competition. Competitive markets respond to consumer demands, but they do not necessarily accomplish other important public policy objectives. The Northwest has a long tradition of energy policies that support environmental protection, energy-efficiency, renewable resources, affordable services to rural and low-income consumers, and fish and wildlife restoration. These public policy objectives remain important and relevant. Given the enormous economic and environmental implications of energy, these public policy objectives need to be incorporated in the rules and structures of a competitive energy market.

In some respects, the transition to a competitive electricity industry is more complicated in the Northwest because of the presence of the federal Bonneville Power Administration. Bonneville is a major factor in the region's power industry, supplying, on average, 40 percent of the power sold in the region and controlling more than half the region's high-voltage transmission. Bonneville benefits from the fact that it markets most of the region's low-cost hydroelectric power. It is hampered by the fact that it has high fixed costs, including the cost of past investments in nuclear power and the majority of the costs for salmon recovery. As a wholesale power supplier, Bonneville is already fully exposed to competition and is struggling to reduce its costs so that it can compete in the market. The transition to a competitive electricity industry raises many issues for the Bonneville Power Administration and the region. In the near term, how can Bonneville continue to meet its financial and environmental obligations in the face of intense competitive pressure? In the longer-term, when market prices rise and some of Bonneville's debt obligations have been retired, how can the Northwest retain the economic benefits of its low-cost hydroelectric power when the rest of the country is paying market prices? And finally, what is the appropriate role of a federal agency in a competitive market? The question is not only whether Bonneville can compete in the near term, but also, should it be a competitor?

Without Regional Consensus...?

While participants on the Comprehensive Review Steering Committee represented, by design, many divergent interests, they were fundamentally interconnected through one unifying value. Collectively, they share an abiding interest in the stewardship of a great regional resource – the Columbia River and its tributaries. The river is the link that brought all the parties together and unites them in a single, overriding goal. That goal is to protect and enhance the assets of this great natural resource for the people of the Pacific Northwest.

Final Report of the Comprehensive Review of the Northwest Energy System

The federal power system in the Pacific Northwest has conferred significant benefits on the region for more than 50 years. The availability of inexpensive electricity at cost has supported strong economic growth and helped provide for other uses of the Columbia River, such as irrigation, flood control and navigation. The renewable and non-polluting hydropower system has helped maintain a high quality environment in the region.

But while the power system has produced significant benefits, these benefits came at a substantial cost to the fish and wildlife resources of the Columbia River basin. Salmon and steelhead populations have been reduced to historic lows, and many runs are or are about to be listed under the federal Endangered Species Act. Resident fish and wildlife populations have also been affected. Native Americans and fishery-dependent communities, businesses and recreationists have suffered substantial losses due in significant part to construction and operation of the power system. The region's ability to sustain its core industries, support conservation and renewable resources, and restore salmon runs is clearly threatened if we cannot reach a consensus regional position to bring to the national electricity restructuring debate. Without a sustainable and financially healthy power system, funding for fish and wildlife restoration could be jeopardized.

The governors of Idaho, Montana, Oregon and Washington, in their charge to the Comprehensive Review, and the Steering Committee in their deliberations, recognized that the electricity industry is changing, whether we like it or not. The Comprehensive Review is not an initiation of change, but a response to change. It is an effort to shape that change, to the extent shaping is possible, to ensure that the potential benefits of competition are achieved and equitably shared, environmental goals are met, and the benefits of the hydroelectric system are preserved for the Northwest. The region's ability to shape the change in the Northwest electricity industry depends on its ability to develop a regional consensus. If the Comprehensive Review fails to result in a consensus for regional action, the electricity industry will still be restructured. A return to the historical industry structure is not an option. Many of the comments received during the public hearing process on the Steering Committee's draft recommendations made it clear that this is not a widely appreciated fact.

What is the likely evolution of the regional electricity market in the absence of effective regional consensus.

For *wholesale* power markets, federal policy advancing competition is already in place. The Energy Policy Act of 1992 and Federal Energy Regulatory Commission (FERC) Order 888 express a strong commitment to opening access to the transmission system to make possible a competitive wholesale power market. Transmission will remain a FERC-regulated activity and will be strictly separated from generation to ensure that transmission owners cannot interfere in the efficient operation of the wholesale power market. Northwest utilities are already in the process of forming an independent transmission grid operator, called IndeGO. The purposes of the independent transmission grid operator are to ensure adequate separation of generation and transmission and to align incentives to ensure efficient and reliable operation of transmission. Bonneville is participating in the IndeGO discussions and has already administratively separated its transmission activities from its energy marketing. Further development of IndeGO will continue regardless of the Comprehensive Review.

Given the strong federal policy commitment to a competitive wholesale power market and an intensifying need for federal revenues, it is likely that without strong regional support for a different outcome, Bonneville's electricity eventually would be sold at market prices. Further, the incongruity of a federal agency as a full participant in a competitive market could result in limitations on Bonneville's market presence. This could be accomplished in many different ways, including auctioning the power, requiring Bonneville to market its power at prices that are tied to a market index, or limiting Bonneville's marketing of products and services. However it is done, any cost-based regional benefits that are derived from public or regional preference are likely to be reduced.

Current electricity policy at the federal level reserves *retail* market competition decisions to the states. However, recent congressional initiatives leave the degree of future state control in question. In any case, the pressure for retail access and its momentum are not in question. In the absence of either fairly strong federal legislation or coordinated regional policy, individual states are likely to move at different rates toward various forms of retail access policy with large power consumers tending to get first access. Unless adequate safeguards are in place to ensure that the owners of monopoly distribution systems cannot unfairly influence consumers' retail energy service choices, the development of competitive retail energy service markets for all consumers will be inhibited. Inconsistent policies among states within an integrated electricity market will lead to market advantages for some areas, a less efficient market, and arbitrage opportunities for electricity traders and marketers.

Utilities under competitive pressure to retain their customers will find it difficult to support the various social and

environmental goals they have supported in the past. Competitive markets will support some social and environmental activity, and recent legislative proposals in Congress suggest that some programs could be mandated at the national level. However, absent action to place the funding of such activities with the separate and regulated elements of the market (transmission or distribution), emphasis on conservation, renewable energy sources and low-income support will decline. The greater the differences among states and utilities in the funding of these activities, the more distorted and less efficient will be the electricity markets.

The “base case” just described has some undesirable features. However, the region has the ability to manage the transition to competition to avoid or mitigate the undesirable features *if* it can reach consensus on the key features of the energy system.

THE COMPREHENSIVE REVIEW

The governors of Idaho, Montana, Oregon and Washington convened the Comprehensive Review of the Northwest Energy System to seize opportunities and moderate risks presented by the transition of the region’s power system to a more competitive electricity market. The governors appointed a 20-member Steering Committee that is broadly representative of the various stakeholders in the power system to study that system and make recommendations about its transformation. The members of the Steering Committee are listed in Appendix B. Each governor has a representative on the Steering Committee to make certain the public is educated about and involved in the Comprehensive Review. In establishing the review, the governors stated:

“The goal of this review is to develop, through a public process, recommendations for changes in the institutional structure of the region’s electric utility industry. These changes should be designed to protect the region’s natural resources and distribute equitably the costs and benefits of a more competitive marketplace, while at the same time assuring the region of an adequate, efficient, economical and reliable power system.”

Since January 1996, the Steering Committee has held 30 day-long meetings. In addition, almost 400 people have been involved in more than 100 meetings of various work groups reporting to the Steering Committee. Hundreds of citizens attended the 10 public hearings that were held throughout the region on the Committee’s draft report. More than 700 written comments were received. This report is the product of that work. It is a recommendation for restructuring the Northwest electricity industry to meet the challenges and seize the opportunities inherent in the competitive transition.

SUMMARY OF RECOMMENDATIONS

The main features of the recommendations of the Steering Committee of the Comprehensive Review of the Northwest Energy System are summarized in the following sections. More detailed discussion of the recommendations is presented in the following chapters. For purposes of organization, this report is presented in six main topic areas: federal power marketing; governance of the Columbia River system (a related topic to federal power marketing); conservation, renewable resources and low-income energy services; consumer access to the competitive market; transmission; and future power system roles for a four-state regional body. Issues related to federal power marketing; conservation, renewable resources and low-income services; consumer access to the competitive market; and transmission were analyzed and discussed in work groups during the review process. Although described as distinct parts, this is an integrated set of recommendations, the parts of which are interdependent.

FEDERAL POWER MARKETING – THE BONNEVILLE POWER ADMINISTRATION

The Steering Committee's goals for federal power marketing are to: 1) align the benefits and risks of access to existing federal power; 2) ensure repayment of the debt to the U.S. Treasury with a greater probability than currently exists while not compromising the security or tax-exempt status of Bonneville's third-party debt; and 3) retain the long-term benefits of the system for the region. The recommendation is also intended to be consistent with emerging competitive markets and regional transmission solutions. The mechanism proposed to accomplish these goals is a subscription system for purchasing specified amounts of power at cost with incentives for customers to take longer-term (15 to 20 year) subscriptions. Public utility customers with small loads would be able to subscribe under contracts that would accommodate minor load growth. Subscriptions would be available first to regional customers in a specified multipart priority order, starting with preference customers, then the direct service industrial customers of Bonneville and the residential and small farm customers of those investor-owned utilities currently participating in Bonneville's residential exchange, followed by other regional customers. Non-regional customers could subscribe after in-region customers. Within each phase of the subscription process, longer-term contracts would have priority over shorter-term contracts if the system is oversubscribed.

Longer-term subscribers would have the right to purchase power at cost for the term of the contract. While the cost of the power from the federal system is currently somewhat above market prices, the costs are generally expected to be below market prices in the future. Short-term subscribers also get the right to purchase power at cost. If they wish to be assured the ability to renew their contracts at cost, they must pay an option fee for the term of their contracts to compensate the U.S. Treasury for the risk of shorter-term contracts. A sliding-scale option fee, ranging between 2 mills per kilowatt-hour for a five-year contract to 0 mills for a 15-20 year contract has been proposed.

The longer-term subscribers assume more risk than current Bonneville customers from the effects of year-to-year variations in weather, future power system cost increases and changes in market conditions. For example, if we were to experience lower than expected market prices that are below Bonneville costs for an extended period of time, the subscribers would still be obligated to pay Bonneville's costs. At the end of their subscription period, short-term subscribers would be able to let their subscriptions lapse and buy at market prices. If they let their subscriptions lapse, however, they would not be able to buy at cost in the future, should that become desirable.

The Steering Committee recognizes Bonneville's existing fish and wildlife obligations and intends that none of its recommendations affect existing trust obligations or treaty rights. The Steering Committee further recognizes that the region will need to provide most of the required fish and wildlife funding, but supports assistance and cost sharing by the federal government. The Committee recommends detailed multiyear fish and wildlife budgets be developed in government-to-government consultations by federal, state and tribal authorities. These budgets would be incorporated into Bonneville rate projections, allowing shorter-term customers certainty regarding fish and wildlife costs. If market prices are above costs, the Treasury would share in these benefits by getting some percentage of the difference between market prices and the cost. The Treasury's share would be applied to accelerate repayment of the federal debt.

Competition raises the possibility of stranded costs – previously incurred fixed costs that cannot be recovered at market prices. If successfully implemented, the subscription system should greatly reduce the possibility of Bonneville experiencing any stranded cost. However, if unmitigable stranded costs remain, a mechanism for recovery of those costs will be required.

Final Report of the Comprehensive Review of the Northwest Energy System

Subscribers may resell power in cases of loss of load and/or to the extent allowed by existing law. Other commercial transactions by the subscriber would not disqualify the purchase of federal power. The benefits of purchases for residential and small farm customers of exchanging investor-owned utilities should be passed on to end users.

The recommendations would have the effect of disposing of much if not all of the firm power available from Bonneville on a long- or intermediate-term basis. The fact that most of Bonneville's power would be subscribed at cost would limit Bonneville's market role. Any remaining firm power and other power products would be sold at Federal Energy Regulatory Commission (FERC)-regulated prices or at competitive prices, where FERC determines that competitive markets exist. To the extent consistent with its obligation to repay Treasury, Bonneville should return to its historic role of marketing power generated by the Federal Columbia River Power System, rather than becoming an aggressive marketer of products and services in the emerging competitive power market. Bonneville should develop a quantitative marketing plan. The plan should be presented to a transition board reporting to the Governors.

In addition, it is recommended that Bonneville would not acquire resources to serve its customers' load growth except on a direct bilateral basis where the customer takes on all the risk of the acquisition. Similarly, it is proposed that Bonneville would not sell directly to new retail loads, beyond the existing direct service industry loads, although it may sell through intermediaries whose transactions would be subject to state or local jurisdiction.

The Committee recommends that the governors of Idaho, Montana, Oregon and Washington appoint a transition board to oversee implementation of these and other recommendations. In particular, the board should periodically determine whether the subscription process is making adequate progress or whether another approach is necessary.

COLUMBIA RIVER SYSTEM GOVERNANCE

The Steering Committee concluded that we cannot expect to achieve both the degree of cost stability the electricity industry requires to maintain the benefits of the Columbia River power system for the region and achieve sustainable fish restoration unless we ensure predictability, accountability and effective governance for the fish and wildlife interests of the river. In short, an effective conclusion of our effort is not possible without an improved system of river governance that pursues fish restoration as a high priority.

The Steering Committee was asked by the Northwest governors to focus on the restructuring of the electricity system and to address the financial stability of the federal power system. The Committee has done our best to recommend changes to the federal system that accomplish that goal. It fully recognizes that there are other important, related issues and decisions, including those affecting fish and wildlife, that must be resolved before a truly comprehensive package can be achieved.

The Steering Committee considered a number of matters related to the governance of the river and the power system. The role of the Northwest Power Planning Council in river governance was not addressed, but needs to be. The Governors should hold the Council or its successor accountable for ensuring that the region is making the most cost-effective use of fish and wildlife funding. River governance is a fundamental part of any effective response to changes in the electric utility industry. Until governance deliberations move forward through a government-to-government consultation among federal, state and tribal authorities, the prospects for a consensus on the regional response to utility restructuring are diminished and controversial. The Steering Committee requests the governors to initiate a broadly based discussion of improvements in river system governance that would provide more effective decision-making for this complex ecosystem and all of its competing uses.

CONSERVATION, RENEWABLE RESOURCES AND LOW-INCOME ENERGY SERVICES

The Northwest electric utility industry has a long and successful history of developing cost-effective conservation and supporting the development of renewable electricity sources, such as wind, geothermal and biomass energy. In addition, the utilities have played a major role in delivering weatherization to low-income households and helping low-income households with their energy bills. Competitive pressures, however, are expected to make significant changes in the ways utilities carry out these activities in the future. The goal of the Steering Committee's recommendations is to provide for maximum local control in the implementation of conservation, renewables and low-income energy services, while establishing an effective minimum standard that ensures stable funding for these purposes.

Final Report of the Comprehensive Review of the Northwest Energy System

To ensure that cost-effective conservation, renewable resource development and low-income weatherization are sustained during the transition to competition and beyond, the Steering Committee recommends that by July 1, 1997, and annually thereafter for a period of 10 years, 3 percent of the revenues from the sale of electricity services in the region (\$210 million in 1995) be dedicated to those purposes. After 10 years, this commitment should be re-evaluated. Three percent of revenues is roughly 65 percent of what was spent for these purposes by the region's utilities and Bonneville in 1995.

The Steering Committee recommends that by July 1, 1999, each of the Northwest states enact legislation that ensures that all electric utilities operating within its borders are meeting the minimum standard for investment in the development of conservation and renewable resources and provision of weatherization and energy-efficiency services to low-income consumers. Utilities should demonstrate compliance with the minimum standard by July 1, 1999. Public utilities may satisfy the standard in aggregate. If this minimum standard is not being met, the legislation should provide for the assessment of a uniform system benefits charge that ensures the collection and investment of funds for these purposes. Due to the rapid emergence of competitive pressures, the Committee strongly recommends prompt legislative action. Legislation implementing these requirements should be implemented simultaneously with open retail access.

The Steering Committee proposes that between two-thirds and five-sixths of the funds be retained by local distribution utilities to carry out locally initiated cost-effective conservation, low-income weatherization and energy-efficiency services and renewable energy projects. Conservation projects implemented and funded by large consumers should be credited against the local conservation target, not including low-income energy-efficiency services. Local utilities would also offer, or allow other electricity service providers to offer, "green" power to their consumers – power from renewable assistance energy sources. The Steering Committee recommends that utilities maintain their current level of low-income energy assistance until states adopt alternative mechanisms for providing these services. The report recognizes and affirms the energy system's historic role in providing energy assistance and proposes that states now provide this assistance by establishing a "Universal Electrical Service Fund" to provide energy bill assistance. This fund could be supported by federal Low-Income Home Energy Assistance Program (LIHEAP) funds, state or local government funds, other funds and/or by a retail distribution system access fee or meters charge.

Some conservation and renewable resource activities benefit from regional planning and coordination. Consequently, it is proposed that between one sixth and one third of the funds be used by a regional non-profit entity with utility, government, consumer and public interest membership. Its functions would be to bring about changes in the markets for targeted energy-efficiency products and services that will improve their market share; to plan and contract for research and limited demonstration of renewable energy technologies, and to support the development of several megawatts annually of renewable generating capacity. A regional technical forum would be established to track regional progress toward the achievement of regional goals and provide feedback and suggestions for improving the effectiveness of conservation and renewable resource development programs. Funding for these activities should be collected in part through Bonneville wholesale rates to the extent regional firm loads are served by power from Bonneville.

How the funds are collected is a matter for state or local decision, as appropriate. The Steering Committee expects that methods of collection that are competitively neutral and affect all participants in the market equally will be found to be preferable.

CONSUMER ACCESS TO THE COMPETITIVE MARKET

The goals of the recommendations on retail markets and customer choice are to encourage a more efficient power system, lower electricity costs, increased product choice and greater product innovation for all consumers. These goals were adopted subject to a commitment to maintain the reliability and safety of the electrical power system. The Steering Committee concluded that this goal could best be accomplished by putting in place a competitive electricity market that is driven by consumer choice. However, there is concern that the benefits of a competitive market may flow unevenly to different classes of consumers and that some small consumers may even suffer harm. The report recommends safeguards intended to help mitigate these concerns.

The Steering Committee recommends that regulators and local utility boards and commissions offer open access for all customers that desire it no later than July 1, 1999. The Committee recognizes that some of these regulatory bodies may choose to phase in full retail access. In these cases, a similar phase-in of the recommendations on conservation, renewable resources and low-income energy services may be effected.

Final Report of the Comprehensive Review of the Northwest Energy System

Direct access may occur prior to July 1, 1999, however, for direct retail access to be implemented promptly, several activities must be accomplished. These include the identification of any stranded costs and, if any stranded costs are determined to exist, the creation of a stranded cost collection mechanism; unbundling and cost-based pricing of delivery services; pilot programs to explore aggregation for small commercial and residential customers; the exploration of market index pricing options for residential and small commercial customers; and implementation of public purposes funding, energy assistance funding and consumer protection mechanisms consistent with this report's recommendations.

To achieve a competitive retail electricity market requires separation of the distribution and electricity marketing functions of current retail utilities. This is necessary to ensure that consumers will have unimpeded access to alternative electricity suppliers, and vice versa, over the wires of the distribution utility. The distribution utility would continue to be a regulated monopoly responsible for the reliable and safe delivery of electricity from electric service companies to consumers over local distribution wires. Electricity service companies will offer a variety of electricity products and services (e.g., firm or interruptible power, power from renewable resources, peak or off-peak power, fixed or spot-market prices) to consumers on a competitive basis and may, in fact, offer other products unrelated to electricity markets. The electricity services portion of current integrated retail utilities could compete in this market if the distribution utility function is sufficiently separated from the electricity services business to ensure that control of distribution is not used to advantage the electricity services business.

Putting such a competitive market in place will require a significant transition and ongoing market maintenance procedures. There is a danger that, until competitive markets have fully developed for all consumers, some of the benefits of increased competition may be realized primarily by large consumers at the expense of small consumers. Therefore, the Steering Committee calls for active government oversight of the transition and active ongoing programs to facilitate and encourage the development of meaningful market access for all consumer classes and to prevent unwarranted cost shifts among consumer classes. Specifically, the policy calls for licensing of new electricity service providers, applicability of consumer protection laws, formal complaint processes, consumer information programs, and a "provider of last resort" to ensure continued affordable service to all consumers. To further minimize cost shifts to small consumers, policies should be adopted to provide utilities a fair opportunity to recover costs of previous investments that may be stranded by the opening of the market. This is viewed as a transitional problem only, and incentives must be included for utilities to mitigate any stranded costs they potentially face.

TRANSMISSION

Transmission is the "highway system" over which the products of electrical generation flow. If there is to be effective competition among generators, transmission facilities should be operated independently of generation ownership. An independent grid operator (IGO) regulated by the Federal Energy Regulatory Commission with broad membership, including Bonneville and the region's other major transmission owners, is proposed as a means of ensuring independence of transmission operation and improving the efficiency of transmission operation. An independent grid operator should also have clear incentives to maintain reliability and encourage efficient use of the transmission system.

The independent operation of Bonneville's transmission facilities is particularly important to effective competition among generators in this region because Bonneville's facilities make up a large part of the regional transmission system. To ensure this independence, it is recommended that Bonneville be legally separated into two organizations – a power marketing organization to market the power from the federal power system and a transmission organization to carry out the transmission functions. The separation of these functions should be structured so that it does not jeopardize or diminish the legal obligation and ability of Bonneville to meet fish and wildlife and other obligations. A separated federal transmission owner (e.g., the Bonneville Transmission Corporation) could lease its assets to an independent grid operator, or could be an independent grid operator and operate other participants' assets if FERC and the other participants agree.

Legislation will be required to accomplish these goals. While legislation is under consideration, Bonneville should move quickly to achieve as much administrative separation as possible, and to participate in efforts to form an independent grid operator that could operate both federal and non-federal transmission assets.

FUTURE POWER SYSTEM ROLE FOR A FOUR-STATE REGIONAL BODY

When the Northwest Power Act was passed in 1980, the authors contemplated an extended time of electricity shortage and the need for increasingly costly large-scale power plants. The Northwest Power Planning Council was established with two representatives from each of the Northwest states (Idaho, Montana, Oregon and Washington) to provide the states and the public a role in determining the region's future need for electricity and how that need could best be met. The Council was also charged with furthering the goals of: encouraging conservation and renewable resources; helping assure an adequate, efficient, economical and reliable power system; providing environmental quality; and protecting, mitigating, and enhancing the fish and wildlife of the Columbia Basin.

The Power Planning Council has been credited with many improvements in electricity planning. However, in an era in which market forces will play the primary role in determining what plants are built and what can be charged for their output, the Council's resource acquisition planning role is no longer relevant. The Steering Committee believes, however, that the remaining goals are still important to the citizens of the region. The issue is how they are to be achieved in the context of a competitive market.

There is much that is unknown about the competitive future we are about to embrace. As the Northwest transitions toward a competitive electricity industry, there are roles that the region would want carried out by a regional body. These roles do not involve resource acquisition planning, regulation or implementation. They do involve monitoring and analyzing the transition to a competitive electricity market and informing policy-makers and the public. This will help ensure that the transition to a competitive market is accomplished efficiently and fairly throughout the region and that the public values the Northwest has sought from its power system are preserved and enhanced.

These roles include:

Conservation and Renewables – working with regional interests to devise ways of overcoming market barriers, participating in market transformation activities, providing guidance in meeting the region's conservation and renewable goals and working with the regional technical forum to track regional progress;

The Competitive Marketplace – providing information, evaluation and analysis of the evolving marketplace to ensure full, fair and effective competition throughout the region; and

Public Participation and Involvement– informing and involving interested members of the public on matters that affect them, their environment and their economy.

The funding of the Northwest Power Planning Council has been through a charge on Bonneville Power Administration rates. If federal legislation affecting the role of the Northwest Power Planning Council or a similar regional body is pursued, the question of the level and sources of the funding should be addressed.

FEDERAL POWER MARKETING: THE BONNEVILLE POWER ADMINISTRATION – ADAPTING TO A COMPETITIVE ENVIRONMENT, PRESERVING THE BENEFITS OF LOW-COST HYDROPOWER FOR THE NORTHWEST

GOALS

The Steering Committee's goals for federal power marketing are to: 1) align the benefits and risks of access to existing federal power; 2) ensure repayment of the debt to the U.S. Treasury with a greater probability than currently exists while not compromising the security or tax-exempt status of the Bonneville Power Administration's (Bonneville's) third-party debt; and 3) retain the long-term benefits of the system for the region. This recommendation is also intended to be consistent with emerging competitive markets and regional transmission solutions.

BACKGROUND

Bonneville is a federal power marketing agency charged with marketing the power output of the federal dams on the Columbia and its tributaries. It is a wholesale supplier, marketing power to utilities that, in turn, sell power to retail consumers. The only exceptions are the direct service industries, which historically have been served directly by Bonneville. On average, Bonneville markets about 40 percent of the firm power in the Northwest and substantial, but varying, amounts of nonfirm power. Bonneville is required to sell its firm power (the power that can be counted upon even under poor water conditions) at cost under contracts to public agency customers (e.g., municipal utilities, public utility districts, cooperatives), residential and small farm customers of utilities that are not public agencies, and direct service industries. Only when it cannot sell all its power within the region is it allowed to market outside the region. As a result of the Northwest Power Act of 1980, Bonneville also has the responsibility of acquiring new resources to meet the loads of those customers that choose to place their growing load requirements on Bonneville.

Historically, Bonneville has been a low-cost supplier of electricity. In recent years, however, Bonneville's power has lost its price advantage. This has been the result of a combination of factors, including low natural gas prices, surplus generating capacity on the West Coast, the opening of the competitive wholesale electricity market and the resulting decline in electricity prices. Bonneville has also experienced increased costs resulting from requirements for salmon recovery, resource acquisition costs and other factors. Bonneville's ability to reduce costs is hampered by the fact that a large part of its costs are fixed. These fixed costs include repayment of debt to the U.S. Treasury for the construction of the hydroelectric and transmission systems and repayment of the debt for three Washington Public Power Supply System nuclear power plants.

The opening of wholesale electric competition has put great stress on Bonneville. Bonneville's utility and direct service industry customers now have a greater degree of choice under amended or new power sales contracts, and current power sales contracts will expire in 2001. Bonneville has been struggling to determine its future competitive role and to secure sufficient sales to cover its costs and make its payments to the Treasury and the Supply System. The ultimate risk, should Bonneville be unable to cover its costs, lies with the Treasury. While this is occurring, many of Bonneville's traditional customers, particularly those without generating resources, continue to look to the agency as their primary or exclusive power supplier.

In the future, however, conditions are likely to change. Many industry observers expect that gas prices and the market price of electricity will eventually rise. In addition, Bonneville's fixed costs can be expected to fall as debt is paid off. When this happens, the price of Bonneville's power would be very attractive. Whether the Northwest will be able to retain these future benefits has been brought into question, in part due to legislation that would sell federal power marketing agencies. Even if Bonneville is not privatized, the revenues that a low-cost power producer could generate could be very attractive to future Congresses, particularly if the Treasury has been called upon to bear the risks of that power producer when conditions were not so favorable. In this context, a long-term solution that retains the benefits of the system in the Northwest would be highly desirable.

Finally, there is the question of the appropriate role of a federal agency in a competitive market. Right now, Bonneville

is struggling to compete. In the longer-term, as restructuring proceeds and the electricity industry becomes more and more competitive, the question may no longer be “can Bonneville compete?” but “should Bonneville compete?”

RECOMMENDATIONS

Summary

The Steering Committee recommends the institution of a subscription-based system for marketing the electricity produced by the federal system. The subscription process would maintain the principles of public and regional preference to the output of the Bonneville system at cost. The recommendation is designed to facilitate a fully competitive bulk power market and freedom of action by customers. Simultaneously, it is intended to better balance risk and rewards among customers, Bonneville and the U.S. Treasury. The subscription system is central to aligning the risks and benefits of the federal power system, and to reducing the risk faced by the Treasury. Treasury currently faces the risk of market prices below cost, but does not receive the benefit when market prices are above costs.

Subscribers would contract to purchase power from the system at cost, take or pay, for the period of their subscriptions, including periods similar to what the region is now experiencing when costs are above market prices. Subscribers would also be able to purchase at cost when costs are below market levels. The power product contracted for could vary depending on the requirements of the customer.

Bonneville would not acquire additional resources to serve load growth except on a bilateral contract basis, where the customer absorbs the risk. However Bonneville could offer short-term products and services that are responsive to variations in loads from planning estimates to those customers willing to pay for such services. Bonneville would not sell directly to new retail loads, beyond the existing direct service industry loads. Moreover, if the system is fully subscribed, there would be no need for Bonneville to market to retail loads.

No remedy is possible unless Bonneville can effectively manage and control its costs. In this recommendation, subscribers would gain advisory influence over power-related costs and would have the ability to call for binding arbitration on certain cost issues under their contracts.

Several provisions of the subscription process are specifically intended to provide benefits to the Treasury and preclude the need for stranded cost mechanisms. However, to the extent that unmitigable stranded costs remain, then a mechanism to recover these costs will be required.

The Committee recommended a transition board appointed by the governors, to oversee the subscription process and report to the governors on its prospects for success, among other potential tasks.

Disposition of Federal Power

Long-term subscriptions provide stability to Bonneville, the Treasury and customers. However, a number of customers, particularly those without generating resources, may want to contract for much of their load in shorter-term intervals as they make the adjustment to new competitive markets.

The core or basic product of federal power marketing is energy from the federal system. Depending upon limitations of availability, contracts for this product should be available to regional customers at cost. Customers may then purchase other services that are individually priced by Bonneville to change this energy into a product that meets their needs, or alternatively they may provide it themselves. In addition, customers may be willing to purchase the energy for differing periods of time or with different obligations placed on Bonneville. This affects the degree of risk the Treasury is absorbing, and in turn should be reflected in the price the customer is required to pay.

One product could be provided for customers with predictable loads, or ones that acquire load shaping services from another entity. Alternatively, Bonneville would offer a take-and-pay arrangement for customers that want to rely upon Bonneville to serve their actual monthly loads. The latter service would cost more in order to cover the revenue uncertainty that Bonneville would face as a consequence.

Long-term subscribers get the right to purchase power at cost for the term of the contract, up to 20 years. While the

cost of the power from the federal system is currently somewhat above market prices, the cost is generally expected to be below market prices in the future. For potential subscribers to make a long-term commitment to Bonneville, particularly at a time when the agency's rates are above market, Bonneville needs to take actions that push the envelope of cost reductions. In addition to the agency's own initiatives in reducing costs, long-term contracts need to be structured in a manner that is very explicit regarding the limitations on the customer's obligation to pay.

Short-term subscribers also get the right to purchase power at cost, paying the same general costs as the long-term customers. For at least the short-term following 2001, renewable contracts of shorter duration place an element of potential risk on the Treasury, associated with customers leaving if Bonneville costs became significantly higher than market. Because of this, the short-term subscribers are required to pay an option or subscription fee if they want to reserve the right to re-subscribe at cost after the contract expires. The option fee would enable the customer to either extend the cost-based contract, or to reduce or terminate loads on Bonneville at the end of the existing contract commitment. The option fee is a premium payment reflecting the risk to the system and to the Treasury of shorter-term contracts. A customer also has the choice of purchasing cost-based power without paying an additional option fee under the initial offering. However, at the end of that customer's purchase term, that customer will be able to purchase power from Bonneville only at market-based rates. This further purchase ability does not imply preferential access at market prices.

The option fee should be priced to reflect its value, while at the same time not making it economically and competitively prohibitive. Using a range of market conditions and assumptions regarding Bonneville costs, Bonneville and the Northwest Power Planning Council have identified a sliding scale option fee ranging from 0 mills/kilowatt-hour for long-term (i.e., 15- to 20-year) contracts to 2 mills/kilowatt-hour for five-year contracts. Bonneville should prospectively develop competitively priced tools that balance risks and rewards between shorter-term and longer-term load commitments and that reflect the overriding purpose of compensating the Treasury for the risk associated with shorter-term contracts. Short-term subscribers could continue to purchase short-term in the future by purchasing subsequent option fees, or they could convert to long-term contracts without subsequent option fees.

The subscribers assume a greater level of risk than in the current system. For example, if the region were to experience lower than expected market prices that are below Bonneville costs for an extended period of time, the long-term subscribers would still be obligated to pay Bonneville's costs. Short-term subscribers would be able, at the end of their subscription period, to let their subscriptions lapse, but may elect to stay, hoping to realize the longer-term savings associated with the system. There would be a higher level of annual probability of Treasury payments, placing more risk on the subscribers from the effects of year-to-year variations in weather, future power system cost increases (e.g., the cost of generator rewinds and other necessary maintenance and upgrades) and changes in market conditions.

The process for the disposition of federal power should be completed by 2001, so that the results can be in place when Bonneville's existing contracts expire. The term of the contracts would be determined by the individual subscribers, during their initial subscriptions for firm power. Although 20 years would provide maximum contract certainty for Bonneville under current law, it is in the agency's best interest not to have all contracts expire at the same time, as is the case in 2001. Firm power would be subscribed for by month with appropriate ancillary delivery services. Any remaining firm power and other products should be sold at prices regulated by the Federal Energy Regulatory Commission (FERC) or at competitive prices, where FERC determines that competitive markets exist, and revenues should be used to reduce costs to the subscribers.

At the end of a contract, whether long or short-term, the purchaser has a right of first refusal to renew the contract for subsequent periods so long as the appropriate option fee has been paid. The initial subscription, and any subsequent ones, would follow a specific priority order. Any power that is freed up as a result of non-renewal of contracts would be offered to others at cost through the same priority structure described below.

Priority for Subscriptions

The priority order for subscriptions would be implemented in a sequential multiphase process. Customers could elect to split their subscriptions between long- and short-term contracts. The phases are structured so that publicly owned utilities get first priority; direct service industries and representatives of residential and small farm customers of investor-owned utilities get second priority; other regional customers, such as representatives of investor-owned utility commercial and industrial customers, get next priority; and non-regional customers get last priority. Within this overall framework, there is an emphasis on long-term subscriptions, so that, to the extent there is a conflict due to over-

subscription within a phase, subscription term would be the tie-breaker, with the longer-term having priority. Customers having long-term contracts or those that paid an option fee should have broad rights to extend, renew or convert their contracts to longer-terms, up to 20 years, at any time during the contract life, independent of the length of the existing contract, provided at the time of renewal they have a qualified load.

Phase 1

In the first phase, loads of regional public utilities and cooperatives would subscribe with no limitations on the term, within the current 20-year maximum. The first phase would be reserved for publicly owned utilities to subscribe up to the average of the contractual entitlements of the highest two consecutive years of the 1997-2001 contract period, plus some provision for minor load growth of small full-requirements utilities representing in the aggregate no more than 1,000 average megawatts of Bonneville load. Additional load growth of these small utilities and the load growth of other public utilities may be met through bilateral contracts or tiered rates.

Phase 2

During the second phase, the direct service industries and the residential and small farm customers of the investor-owned utilities (through their representatives, described below) would be allowed to subscribe with no limitations on term, within the current 20-year maximum. The direct service industries' subscriptions would be limited by the average of the contractual entitlements of the highest two consecutive years of the 1997-2001 contract period. Each investor-owned utility customer subscription would be limited by the average total actual regional exchange load of its residential and small farm customers, again, in the two highest consecutive years between 1997 and 2001. If there is over-subscription, subscription term will serve as the tie breaker, with the longer-term having priority.

For the purposes of the subscriptions, investor-owned utility residential and small farm customers could be represented by investor-owned utilities or other entities that serve Northwest residential or small farm loads, as certified by state regulators. The benefits of purchases for these customers should be passed through to the end users.

Phase 3

The third phase would be for other regional wholesale and direct service industry loads. Each subscription is limited by the subscriber's total regional load. To the extent there is over-subscription in this phase, longer-term subscriptions will have priority.

Phase 4

In the fourth phase, Bonneville could sell to regional wholesale and direct service industry loads at market prices for those who wish to buy only at market prices in the future. In addition, Bonneville could sell "excess" federal power for periods up to seven years to out-of-region customers. "Excess" is a defined term in recent legislation. Power sold in this phase would be sold subject to current law. As a principle, the Steering Committee believes that in-region customers of Bonneville should have the ability to secure non-recallable Bonneville contracts of a time period at least equal to out-of-region customers of Bonneville.

Subsequent Subscriptions

To the extent firm power becomes available as a result of non-renewal of contracts, the remaining power will be offered through the same multiphase process described above. Customers that elect not to subscribe to Bonneville, or that subsequently allow short-term subscriptions to lapse would be served at market prices in the future. Contracts subject to recall for public preference under current law would be subject to recall only for loads of new public utilities and after a waiting period of up to five years from formation of the utility, depending on the availability of power.

Resale of Power

Subscribers may resell the power for which they have subscribed for the remaining term of the contract in cases of loss of load and/or to the extent allowed by existing law. Power will be considered to be delivered to regional loads if, at the time of delivery, the subscriber serves qualifying loads equal to or greater than the amount delivered. Other commercial

transactions by the subscriber should not disqualify the purchase of federal power.

The Exchange

As a result of the Northwest Power Act of 1980, Northwest utilities have the right to sell to Bonneville an amount of power equal to that required to serve their residential and small farm customers at the utilities' average system costs and receive an equal amount of power at Bonneville's average system cost. In reality, this is an accounting transaction. No power is actually delivered. This was intended to be a mechanism to share the benefits of the low-cost federal hydropower system with the residential and small farm customers of the region's investor-owned utilities. As a result of decisions made by Bonneville in its most recent rate case, those benefits have been reduced. The Steering Committee acknowledges that the residential and small farm consumers of exchanging investor-owned utilities will be adversely affected by the reduction of exchange benefits. Congress intervened for one year to stabilize the exchange benefits. However, on October 1, 1997, there will be rate increases to the residential and small farm customers of the exchanging utilities. The Steering Committee encourages the parties to continue settlement discussions and to explore other paths to ensure that residential and small farm loads receive an equitable share of the benefits of the federal base system.

FISH AND WILDLIFE

The Steering Committee recognizes that fish and wildlife restoration and mitigation obligations exist and expressly intends that none of its recommendations should be implemented in a way that alters, amends, diminishes or repeals the trust obligations of the federal government, or the treaty and other rights of the tribes, including those rights associated with tribal hunting and fishing, water and other natural resources.

The Committee recognizes that the cost of additional fish and wildlife restoration investments beyond those currently contemplated in the fish and wildlife Memorandum of Agreement is unknown. Additional costs could be incurred, particularly if measures are undertaken to restore historic river conditions in some segments of the Columbia River Basin. The Committee believes that the region will need to provide the bulk of those fish and wildlife restoration funds. At the same time, the Committee emphasizes the importance of an energy industry restructuring package that shares the future benefits of the power system among the parties in the region. The Committee believes that the federal government should provide additional assistance and share the costs in the restoration effort, particularly given the provisions of the U.S./Canada Pacific Salmon Treaty, the Endangered Species Act and the fact that federal land and water management practices have had an adverse effect on fish and wildlife populations that are being protected and restored with regional ratepayer funds.

The Committee further recommends that flexible, but detailed, multiyear fish and wildlife budgets are essential to the accountability and fiscal management of the restoration effort and should be developed in government-to-government consultations by the federal, state and tribal sovereign governments on a rolling five-year basis. Budgets of this kind will help discipline the restoration efforts and will help provide relative certainty for the power system and fish and wildlife managers.

This recommendation assumes that sufficient information will be available before 2001 to prepare a five-year fish recovery budget, and that the input from this process could be incorporated into Bonneville rate projections. This process should provide shorter-term customer certainty regarding fish costs, and the opportunity for fixed five-year rates, as Bonneville is currently offering through 2001.

OWNERSHIP BENEFITS FOR THE U.S. TREASURY

Currently, the overall "risk taker" regarding Bonneville's responsibility to meet financial targets is the U.S. Treasury, as the recipient of annual debt payments from Bonneville. To the extent that Bonneville secures revenues to cover all costs including Treasury payments, there is no incremental risk to the Treasury. However, in the event that Bonneville's revenues are not sufficient to cover its costs, including Treasury obligations, the shortfall would be handled as a deferral of any difference between the Treasury obligation and the actual payment.

It is financially unstable and politically undesirable to anticipate a federal power marketing agency operating in an environment in which the Treasury faces excessive financial risk and/or a probability that there will be a deferral of

obligations on a recurring basis.

During the last 13 years, Bonneville has not deferred a Treasury payment. Also, with newly adopted rates, Bonneville is not projecting a deferral for the five-year period through 2001. However, the amount of money involved is significant, which in turn makes the risk to the federal government significant. Between 2002 and 2006 Bonneville is scheduled to pay a total of \$2.063 billion to the Treasury, with a net present value of \$1.661 billion. Over a 25-year period, these amounts are \$11.848 billion, with a net present value of \$5.029 billion.

Bonneville faces in 2001 an environment in which customer contracts expire, markets may be lower than agency costs and there is uncertainty regarding fish mitigation costs. In the longer-term, market conditions should change to Bonneville's favor, but not necessarily by 2001. A solution needs to be found that both improves Treasury's position from the status quo, and over time offers an incentive to the federal government to continue operating Bonneville. Four actions are recommended to address this situation.

1. As referred to in other sections, Bonneville needs to pursue all actions possible in the short-term to cut costs, thereby giving the agency the best opportunity to either meet or come close to competitive market prices with cost-based products, thereby retaining a strong customer base.
2. To the extent that there is a deferral of any portion of the Treasury payment in any year, this should become an immediate repayment obligation when Bonneville's costs fall below market. When Bonneville has an opportunity to adjust rates and there is a projected positive difference in Bonneville's favor between market and cost, the next set of rates would remain at market for a sufficient period to fully recover any obligations that had been deferred from the previous period.
3. As described in the section on "Disposition of Federal Power," shorter-term subscriptions will pay an option fee or other higher price that would prospectively reimburse the Treasury for losses or deferrals due to the short term of the subscriptions. This revenue should be used by Treasury to accelerate repayment of Bonneville's debt.
4. When Bonneville's cost-based rates are below market, customers would agree that subsequent rates would contain an additional share of the difference between an indexed market rate and cost-based rates. This share would be paid to Treasury as a "repayment acceleration payment" as a supplement to each annual obligation. The customers still benefit to the extent that these funds are being applied against Bonneville Treasury payments, which will reduce their future costs over time. The U.S. Treasury benefits in that it is receiving cash that is otherwise not due until a future date. This provision would apply to the extent that market prices exceed cost-based rates where the costs include any repayment of past deferrals due to the previous provisions.

STRANDED COST

The Committee believes that the recommendations in this report, prudently implemented, should dramatically reduce any risk that Bonneville would need to seek stranded cost recovery. Nevertheless, Bonneville, like other Northwest utilities, faces the prospect of load loss due to increased competition associated with greater customer choice at the wholesale and retail levels. It is this Committee's expectation that Bonneville will do all that it can to manage its costs and take other appropriate actions to avoid a stranded cost charge. However, to the extent unmitigable stranded costs remain, then a mechanism to recover these costs will be required.

CUSTOMER ADVISORY COMMITTEE

Customers, particularly those signing up for long-term commitments, need to have an effective mechanism to assure them that Bonneville's revenues and costs over time reflect the intent of their power sales contracts. Existing federal legislation allows for appointments of advisory committees to assist agencies such as Bonneville, without exercising formal governance responsibilities. The Bonneville administrator would continue to report to the Department of Energy, but would receive strong customer input through an advisory committee. The committee would consist mainly of subscribers, but also would include representatives of other interests. The committee would review Bonneville's budget requests, overall capital budgeting levels and operating cost levels, rate setting, key marketing issues, and provide input into the power-related capital and operating cost decisions of the Corps of Engineers and the Bureau of Reclamation. The committee would provide input to decision-making authorities on fish-related matters. However, final decisions

regarding fish measures should remain squarely within the purview of the existing or future mechanisms for river governance.

Although the advisory committee should be helpful in establishing policy direction for the power operations of Bonneville, it is not the primary or exclusive mechanism for subscribers to determine their business relationship with Bonneville. New power sales contracts will define the nature of the business relationship between Bonneville and individual customers. These contracts will have common features and unique characteristics depending upon the types of services the customer is buying from Bonneville. It is proposed that the contracts contain an ability for subscribers to call for binding arbitration on specific power cost-related items that do not affect implementation of fish recovery measures.

BONNEVILLE IN THE COMPETITIVE MARKET

Bonneville should plan to achieve sufficient net revenues from unsubscribed products to meet Treasury payments and maintain cost-based rates to subscribers. Speculative risk to Treasury and subscribers should be minimized. To the extent consistent with its obligation to repay Treasury, Bonneville should return to its historic role of marketing power generated by the Federal Columbia River Power System, rather than becoming an aggressive marketer of products and services in the emerging competitive power market. A quantitative plan for marketing should be presented to the transition board described below reporting to the four Northwest governors.

This recommendation would have the effect of disposing of much if not all of the firm power available from Bonneville on a long- or intermediate-term basis. The fact that most of Bonneville's power would be subscribed at cost would limit Bonneville's market role. Any remaining firm power and other unbundled power products would be sold at prices regulated by FERC or at competitive prices, where FERC determines that competitive markets exist. This approach is intended to provide means for Bonneville to meet its financial obligations, but Bonneville's role in competitive markets must be further defined to respond to concerns about a governmental entity as a participant in these markets.

In addition, Bonneville would not acquire resources to serve its customers' load growth except on a direct bilateral basis, where the customer takes on all the risk of the acquisition. However, Bonneville would be making spot-market power purchases sufficient to: 1) supplement monthly firm hydro energy in meeting current firm loads, and 2) store water for flow augmentation to help rebuild fish populations. This recommendation distinguishes these spot-market purchases, which are not necessarily required to be on a bilateral contract basis, from purchases to meet load growth, which are required to be on a bilateral contract basis.

Finally, Bonneville would not sell directly to new retail loads, beyond the existing direct service industry loads, though it may sell through intermediaries whose transactions would be subject to state or local jurisdiction.

GOVERNORS' TRANSITION BOARD

To ensure public accountability, regional acceptance and prompt implementation of the Committee's recommendations, the governors should appoint a high-level board. This board shall be known as the Northwest Energy Review Transition Board. The Board should remain in place until the recommendations of the Review are implemented or 2001, whichever is sooner.

The Board will work with regional interests and Bonneville in a public process to oversee the subscription process and provide liaison with the Northwest congressional delegation and affected constituencies. The Board periodically should determine whether Bonneville and its customers are making adequate progress on the subscription process or, if they are not likely to succeed on a timely basis, whether another approach is necessary. The Board should periodically report its findings to the governors.

The Transition Board would review Bonneville's progress on the development of procedures for offering and pricing products and services, and Bonneville's role in the competitive market. The Board also would assist the region in responding to federal legislation.

In addition, the Board should be responsible for making recommendations to assist in implementation of the Review's recommendations.

COLUMBIA RIVER SYSTEM GOVERNANCE

Perhaps the central challenge the governors of our four states have given the Comprehensive Review is to advise them as to how the many benefits of the Columbia River system can best be preserved. The Steering Committee has struggled with this challenge and has made considerable progress. At a time when the electricity industry is already engaged in monumental regulatory and related changes, the challenges the river system faces bring an additional dimension of instability that is particularly unsettling. The region cannot expect to achieve both the degree of cost stability the electricity industry requires to maintain the benefits of the Columbia River power system for the region and achieve sustainable fish restoration unless it ensures predictability, accountability and effective governance for the fish and wildlife interests of the river. In short, an effective conclusion of the Committee's effort is not possible without an improved system of river governance that pursues fish restoration as a high priority.

The Steering Committee was asked by the Northwest governors to focus on the restructuring of the electricity system and to address the financial stability of the federal power system. The Committee has done its best to recommend changes to the federal system that accomplish that goal. The Committee fully recognizes that there are other important, related issues and decisions, including those affecting fish and wildlife, that must be resolved before a truly comprehensive package can be achieved. As the governors consider the Steering Committee's recommendations, they should use the opportunity to consult with the appropriate federal, state and tribal authorities and urge that the fishery issues are moved forward with the same level of zeal and dispatch in a parallel process on the same schedule as implementation of these recommendations. Addressing both power and fish concerns will help achieve a consensus in the region that will benefit our efforts as federal restructuring legislation advances.

The Steering Committee considered a number of matters related to the governance of the river and the power system. The role of the Northwest Power Planning Council in river governance was not addressed, but needs to be. River governance is a fundamental part of any effective response to changes in the electric utility industry. Until governance deliberations move forward in government-to-government consultation among federal, state and tribal authorities, the prospects for a consensus on the regional response to utility restructuring are diminished and controversial.

To ensure accountability, the governors should insist that the Council or its successor agency include in its Columbia River Basin Fish and Wildlife Program a prioritized budget for investments in fish and wildlife measures, including the relative priority of operational changes to the hydropower system. The governors should hold the Council or its successor accountable for ensuring that the region is making the most effective use of available fish and wildlife funding.

For some, the issue of river governance appears as intractable as any the region has ever faced. However, there is reason for hope. Many of the stakeholders have been working together in various forums. The Committee believes consensus is possible and believes it is important to pursue it on a schedule that ensures that the issue can be addressed expeditiously.

The Steering Committee requests the governors to initiate a broadly based discussion of improvements in the river system's governance mechanisms that would provide for more effective decision-making for this complex ecosystem and all of its competing uses.

CONSERVATION, RENEWABLE RESOURCES AND LOW-INCOME ENERGY SERVICES – REFLECTING THE VALUES AND MEETING THE NEEDS OF NORTHWEST CITIZENS

GOALS

Three clear goals are proposed for conservation, renewable resources and low-income energy services:

- *Conservation* – to ensure that all cost-effective electric efficiency opportunities are captured in a manner consistent with increasingly competitive electricity markets.
- *Renewable resources* – to continue to develop renewable resources in the region.
- *For residents of the Northwest who must live on limited incomes* – to ensure low-income consumers are adequately, affordably and fairly served in a competitive electricity market.

The Steering Committee believes that the goals for conservation and renewable resources should be achieved by relying, wherever possible, on market forces to accomplish cost-effective conservation and renewable resources. However, the Steering Committee recognizes that the market for energy-efficiency services may not capture all cost-effective conservation. Similarly, potentially valuable renewable resource technologies, which are not currently economically competitive, may benefit from regional investments that reduce their future costs. The Steering Committee also recognized that competitive markets are unlikely to provide households with limited incomes with means to meet their basic electricity services needs at the same level and quality they currently enjoy.

The Steering Committee is recommending that during the transition to a competitive electricity market, the region's retail electricity suppliers should commit 3 percent of their retail energy service revenues (estimated to be approximately \$210 million in 1995) to facilitating the development of cost-effective conservation and appropriate renewable resource options, and sustaining appropriate low-income energy services. The Steering Committee recommends that tariffs, rates or other fees imposed to collect these funds be implemented simultaneously with implementation of open retail access.

The Steering Committee acknowledges the resolutions and letters of support for public purposes that were submitted by the region's public utilities commenting on the draft proposal. Committee members urge these publicly-owned power systems to honor their commitments. The Steering Committee believes that its recommendations provide for maximum local control while establishing an effective minimum standard that ensures stable funding for the public purpose recommendations.

• BACKGROUND

• Conservation

For nearly two decades, electric utilities in the Northwest have been the dominant force behind the development of conservation. The rationale for utilities' active pursuit of conservation stemmed from the fact that, until quite recently, the cost of new power generation exceeded the price charged consumers for electricity. Individual consumers were not paying the full cost of new generation, so acquiring new generating resources to serve new loads raised everyone's rates. When utilities acquired conservation at a lower cost than new generation, the total cost of electricity for all consumers was less.

Conservation faces a different environment today than it did just a few years ago:

- The costs of new resources avoided by conservation are lower, leaving fewer conservation measures cost-effective.
- Retail electricity prices for many consumers are currently above the marginal cost of new generation. This means that these consumers have greater economic incentive to invest in conservation than do utilities.
- Competitive pressures, particularly retail access, make it more difficult for utilities to include the cost of conservation programs in their rates. If a utility adds the cost of conservation invested in one customer's home

or business to the rates charged to all its customers, some customers may seek an alternative supplier whose costs do not include conservation.

Despite these changes, conservation that costs less than alternative sources of power remains available for development in the region. For example, in its 1996 draft power plan, the Northwest Power Planning Council estimated that approximately 1,500 average megawatts of conservation would be cost-effective to develop in the region over the next 20 years. This is roughly equivalent to the electricity demand of a city half again as large as Seattle. There is some controversy about these estimates. The Steering Committee has not independently verified the Council's draft estimates, nor does it endorse them. However, even if these estimates are significantly reduced, the amount of cost-effective conservation remaining to be developed appears large enough to warrant efforts to ensure that it is developed.

There is currently some momentum behind conservation in the region. This momentum is created by existing utility activities, and the funding already committed to those activities, as well as market forces. This momentum could prompt the development of approximately one-third of the region's cost-effective conservation potential over the next few years. By the year 2000, however, competitive pressures on utilities and persistent market barriers could cause the rate of conservation development to decline below the rate necessary to capture all of the region's cost-effective conservation potential. On the other hand, utility customer service efforts and the actions of the market could result in an adequate pace of conservation development. Today, we do not know how much conservation will be developed by the market or by utility efforts, nor do we know what the true nature of the utility business will be in the future.

The Steering Committee is concerned about what happens during the transition and about what conditions will prevail after the turn of the century. Many of the market barriers to development of conservation resources still exist: lack of reliable information; different economic incentives for owners and renters, and manufacturers and consumers; and energy prices that do not fully reflect the environmental costs of that energy. The Committee expects the competitive market for efficiency products and services to be stimulated by the opening of competition. However, the market for efficiency services is still immature. The development of this market should be closely monitored, particularly in the industrial and large commercial sectors where most of the conservation potential is thought to exist. The experience thus far from countries that have already opened up their electricity markets to competition seems to indicate that the market for efficiency products and services will not develop quickly without special attention.

• **Renewable Resources**

Renewable resources can offer unique social and energy system benefits. These benefits include environmental value, such as the avoidance of carbon dioxide emissions that may be contributing to global climate change; resource diversity; and local economic benefits. Some applications of renewable resources, for example, the use of solar photovoltaics in remote locations, are cost-effective today. However, utility-scale solar, wind and geothermal technologies still are more expensive than gas-fired combustion turbines and current market prices. For example, several renewable resource projects designed to confirm various technologies under Northwest conditions are being developed by Northwest utilities and Bonneville. As a result of recent declines in the price of new power generation, these projects are anticipated to produce electricity that is from one and one-half to four times more costly than gas-fired combustion turbines. In an increasingly competitive electricity market, additional renewable resources may not be developed unless their economics improve or consumers demonstrate a willingness to purchase their power at somewhat higher prices because of their environmental benefits.

Though few renewable resources are cost-effective in the near-term, ensuring that renewables are available for future development may have appreciable economic value. An unexpectedly rapid rise in natural gas prices and/or the adoption of carbon dioxide control measures could favorably alter the economics of renewables. For instance, although such estimates are inherently uncertain, it has been estimated that the imposition of a carbon tax of \$40 per ton in the year 2005 could increase the lifetime benefits of developing renewables in the Northwest to just under \$1 billion compared to \$28 million in the no-carbon-tax case.

• **Low-Income Energy Services**

Programs to ensure that low-income consumers are adequately and fairly served include: 1) energy- efficiency services, 2) energy assistance, and 3) customer service practices. Energy-efficiency services include traditional weatherization, creative efficiency programs and consumer education. Energy bill assistance includes emergency assistance, rate

discounts, percentage-of-income payment plans, fuel funds, traditional payment assistance programs, such as the federal Low-income Heating Energy Assistance Program and integration of services with other social service agencies.

Approximately 14 percent of the households in the Northwest are estimated to have incomes below 125 percent of federal poverty guidelines. This amounts to 540,000 households. About 55 to 65 percent of the dwellings occupied by low-income households that are heated with electricity have yet to be fully weatherized. This translates into between 165,000 and 235,000 electrically heated homes, apartments and mobile homes that are not as energy efficient as they should be given current and expected future electricity costs. This means higher electricity bills for those who can least afford them.

Historically, low-income energy service programs have been funded by a combination of federal, state and utility sources. In 1995, roughly \$19 million per year was provided for low-income weatherization assistance in the Northwest. The region's utilities and Bonneville provided about 40 percent (\$7 million) of these funds. Also in 1995, approximately \$39 million was provided for bill payment assistance of some type. The region's utilities provided about 40 percent (\$16 million) of this assistance, with all of the remaining funds coming from federal sources.

In recent years, there has been a substantial reduction in the level of federal contribution to these programs. For example, federal funding of Low-income Heating Energy Assistance Program in Washington State was reduced by 42 percent between 1994 and 1995. State and utility contributions have not been increased to offset the reduction in federal funding.

• **RECOMMENDATIONS**

To ensure that cost-effective conservation, renewable resource development and low-income weatherization are sustained during the transition to competition and beyond, the Steering Committee recommends that, by July 1, 1997, 3 percent of the revenues from the sale of electricity services in the region be dedicated in aggregate over the region to those purposes for a period of 10 years. The Committee believes that it is appropriate to re-evaluate this commitment at the end of the ten year period. Based on 1995 revenues, this amounts to approximately \$210 million per year. This \$210 million is 65 percent of what was spent for these purposes in 1995 by the region's utilities and Bonneville.

The Steering Committee recommends that by July 1, 1999, each Northwest state adopt legislation that ensures that all electric utilities operating within its borders are contributing to the development of conservation and renewable resources and providing weatherization and energy-efficiency services to low-income consumers. The legislation should set forth a minimum standard for retail distribution utility investments in conservation and renewable resources and the provision of weatherization and energy-efficiency services to low-income consumers. If by July 1, 1999, this minimum standard is not otherwise being met, the states should provide for the assessment of a uniform system benefits charge that ensures the collection and investment of funds for these purposes. Due to the rapid emergence of competitive pressures, the Steering Committee strongly recommends prompt legislative action.

The Steering Committee believes that the majority of these funds are most appropriately used at the local level. Consequently, as much as five-sixths of the funds could be retained by local distribution utilities to carry out locally initiated programs to develop cost-effective conservation, increase the use of renewable resources and provide low-income weatherization and energy-efficiency services. The Steering Committee also believes that retail distribution utilities should have the option of supporting the use of renewable resources through local initiatives. Local distribution utilities, to the extent they chose to exercise the option to develop renewable resources or provide incentives for renewable resource marketing, will be able to retain the greatest proportion of these funds.

Some conservation and renewable resource activities may, however, benefit from regional planning and coordination. The Steering Committee recommends that between one-sixth and one-third of the funds be used by a regional non-profit agency with consumer, utility, government and public interest membership. Its functions would be to bring about changes in the markets for targeted energy-efficiency and renewable resource products and services that will improve their market share; to plan and contract for research and limited demonstration of renewable energy technologies; and to support the development of renewable generating capacity. The approximate allocation of funds to different purposes is shown in Table 1.

A Regional Technical Forum would be established to develop standardized protocols for verification and evaluation of energy savings, to track regional progress toward the achievement of the region's conservation and renewable resource

goals and to provide feedback and suggestions for improving the effectiveness of conservation and renewable resource development programs in the region. The Steering Committee's specific recommendations are described in detail in the following sections.

- **Conservation**

- Conservation was divided into two areas for action: local and regional conservation. Local conservation covers those actions designed to influence on-site consumer efficiency choices. Local conservation also includes low-income weatherization activities. Regional actions include the establishment of a regional technical forum and a non-profit entity to carry out conservation market transformation.

Local Conservation, Including Low-Income Weatherization

The Steering Committee recommends that the region's retail distribution utilities allocate at least 2 percent of the revenues from sales of electricity and distribution services toward the development of cost-effective conservation and low-income weatherization and energy-efficiency services for the next 10 years. This investment would be approximately \$140 million per year based on 1995 revenues. The Steering Committee also recommends that approximately 52 percent (roughly \$110 million per year) be allocated to local conservation investments and that 14 percent (about \$30 million per year) be allocated for local investments in low-income weatherization in the region. Customers that use large amounts of electricity should be credited for documented cost-effective conservation investments made in their facilities. Such credits should not include their contribution to regional market transformation and renewable resource research and demonstration efforts and low-income weatherization and energy-efficiency service costs. The Steering Committee recommends that local conservation efforts and low-income weatherization funding be provided through direct contributions from the region's retail distribution utilities. Similar to the new Bonneville/State agreement, utilities are encourage to use the existing state/local agency low-income weatherization system as a means of accomplishing this work to avoid duplication.

Table 1
Annual Allocation of Funds to Conservation, Renewable Resources
and Low-Income Energy Services

Purpose	Percent of electricity revenues	Percent of public purpose funding	\$ Millions based on 1995 revenues
Local Conservation	1.6%	52%	\$110
Low-Income Weatherization	0.4%	14%	\$30
New Renewable Resources	0.0% - 0.49%	0.0% - 16%	\$0 - \$34
Total – Local Administration and Implementation	2.0% - 2.49%	67% - 83%	\$140 - \$174
Conservation Market Transformation	0.43%	14%	\$30
Renewable Resource Market Transformation	0% - 0.49%	0% - 16%	\$0 - \$34
New Renewable Resources ¹			
Renewable Resource Research	0.01%	>1%	\$1
Renewables Development and Demonstration	0.07%	2%	\$5
Total – Regional Administration and Implementation	0.52 % - 1.0%	17% - 33%	\$36 - \$70
Total	3.0%	100%	\$210

For purposes of tracking regional progress on conservation and low-income weatherization, the Steering Committee recommends that all retail distribution utilities and state and local low-income weatherization service providers adopt and publish an annual report of their conservation and low-income weatherization achievements. This report should identify at least the amount of conservation achieved by economic sector, the number of dwellings occupied by low-income households that were weatherized and level of utility investment in these areas. The Committee also recommends that utilities make this report available to the non-profit entity established to carry out regional market transformation for conservation and renewable resources so that regional efforts can be effectively and efficiently coordinated with local efforts.

Regional Technical Forum

The Steering Committee recommends the formation of a Regional Technical Forum. The Congress directed Bonneville and the Northwest Power Planning Council to establish a forum to develop standardized protocols for verifying and evaluating conservation savings. The Steering Committee recommends that in addition to the charge given it by Congress the Regional Technical Forum should also track progress toward achievement of the region's goals for conservation and renewable resource development and provide feedback and suggestions for improving the effectiveness of conservation and renewable resource development programs. The Regional Technical Forum should conduct periodic reviews of the region's progress toward meeting its conservation and renewable resource goals at least every five years. These periodic reviews should acknowledge changes in the market. Any recommended changes for improving the effectiveness of conservation and renewable resource programs should be communicated to the appropriate decision-makers. The Regional Technical Forum should be composed of representatives of utilities, other electricity service providers, government and public interest groups.

Market Transformation

The Steering Committee calls for the region's retail distribution utilities to mount a coordinated effort to transform markets for efficient technologies and practices. The intent of market transformation is to undertake activities that will increase the market share of targeted efficiency products and services that will be sustained after incentives or other

support are withdrawn. A successful example is the effort to improve the efficiency of manufactured housing in the Northwest. Utilities initially paid significant incentives for the construction of very efficient manufactured homes. As a consequence, the demand for such homes was so great that it was possible to remove the incentives while still capturing a high percentage of the market.

Because markets invariably cut across utility and jurisdictional boundaries, it makes most sense to pursue these efforts regionally. This effort should establish a non-profit organization to manage conservation market transformation ventures for the region. This organization's governing body should consist of consumer, utility, government and public interest representatives. This organization should have a planned life of at least 10 years in recognition of the time required to permanently transform markets and the range of markets or end-uses to be targeted. The recent formation of the Northwest Energy Efficiency Alliance, whose initial funding is coming from approximately equal contributions by Bonneville customers through Bonneville's rates and the region's investor-owned utilities, appears to be consistent with the Steering Committee's recommendations. The Steering Committee believes that approximately 0.43 percent of retail distribution utility revenues (approximately \$30 million per year in 1995) should be allocated for conservation market transformation.¹

Renewable Resources

The Steering Committee considered a range of options for meeting its goal for developing renewable resources in the region. The Committee's recommendations for renewable resources are described below.

Existing Renewable Resource Projects

The Steering Committee calls for the sponsors to complete the current wind and geothermal demonstration and pilot projects. Funding these projects is the responsibility of the respective project sponsors and is *not* included as part of the revenues to be committed to the development of new renewable resources.

New Renewable Resource Projects

The Steering Committee also recommends that renewable resource market transformation activities be planned and carried out by the newly established non-profit entity charged with conservation market transformation. Alternatively, retail distribution utilities may dedicate the equivalent of their share of the regional renewable resource market transformation funds to locally initiated programs. Such funds should be earmarked toward defraying the above-market costs of renewable resources. Among many options, the utility could use its share of the funds to provide incentives for "green marketing" programs (i.e., the sale of power from qualifying renewable resources), acquire renewable resources or have marketers bid to leverage the utility's share to yield the greatest value for its customers. Whether regionally sponsored or locally initiated, renewable resource market transformation activities should focus initially on the development of new renewable resource technologies, including solar, wind, geothermal, hydroelectric (outside of protected areas as defined by the Council, and other federal or state agencies and statutes) and low-emission organic, non-toxic biomass. Depending on the success of green marketing to consumers in the region, additional renewable resource development may occur. The Steering Committee recommends that approximately 0.49 percent (approximately \$34 million per year based on 1995 revenues) of the region's retail revenues be invested annually to facilitate renewable resource market transformation. The Steering Committee believes that utilities should be permitted to invest renewable resource funds with Bonneville in order for the agency to make new renewable resource purchases on their behalf.

Renewable Resource Research, Development and Demonstration

The Steering Committee recommends that the region's retail distribution utilities to allocate approximately \$1 million

¹ Bonneville currently funds publicly-owned utilities' shares of the regional conservation market transformation effort. After 2001, funding for conservation market transformation, renewable research and development, and direct application renewables should be collected through Bonneville rates in proportion to the share of regional firm loads that are served by federal resources. Investor-owned utilities, publicly owned utilities and direct service industrial customers whose regional firm loads are served in whole or in part from resources other than direct or indirect federal purchases would fund the remainder independently.

per year for research, and \$5 million per year for development and demonstration of distributed renewable resources. These funds would be used by the non-profit entity established to carry out market transformation for conservation and research, development and demonstration of renewable resources.

“Green Marketing”

The Steering Committee recommends that retail distribution utilities should provide for so-called green marketing to individual consumers in advance of full retail open access. Retail distribution utilities may accomplish this by offering their retail consumers renewable resources or by permitting other energy service providers to sell renewable resources to their retail consumers.

Low-Income Energy Assistance

The Steering Committee recognizes and affirms the energy system’s historic role in providing energy assistance to low-income consumers. The Steering Committee calls for utilities to maintain their current level of low-income energy assistance until such time as states adopt alternate mechanisms for providing these services. These alternatives should ensure that electricity prices are as low as possible and that energy-efficiency and consumer services, such as level payment mechanisms, remain in place until they are supplanted by other approaches. The Committee further recommends that states now ensure this assistance by establishing a Universal Electrical Service Fund. This fund could be supported by federal Low-Income Heating Energy Assistance Program funds, state or local government funds, other funds and/or by a retail distribution system access fee or meters charge. Qualified low-income (i.e., incomes 125 percent or less of the federal poverty level) customers would be entitled to receive from all electricity suppliers the bill assistance or rate discount needed to ensure that they do not pay more than a fixed proportion (e.g., 5 percent) of their income for electric energy services. All electricity suppliers could draw from the Universal Electrical Service Fund to provide the bill assistance needed to serve each qualified low-income customer, plus a standard administrative cost. Existing retail distribution utility low-income energy assistance program expenditures should be credited toward any required contributions to the Universal Electrical Service Fund.

COLLECTING AND ALLOCATING THE FUNDS

The Steering Committee believes that a new mechanism is needed to ensure adequate and stable funding for conservation, renewable resources and low-income energy-efficiency services. This mechanism must be compatible and consistent with a competitive market. The committee recommends that before July 1, 1999, each Northwest state enact legislation that:²

1. Establishes a minimum standard for electric distribution utility investments in conservation, renewable resources and the provision of weatherization and energy-efficiency services for low-income consumers. This standard should apply equally to publicly owned and investor-owned utilities.
2. Determines the minimum annual investment per state based on a total regional investment target of 3 percent of regional electrical service revenues (estimated to be \$210 million in 1995). The Steering Committee acknowledges that a revenue-based approach to allocating collection of these funds will be inequitable in some instances, for example, in high distribution cost/low density systems. In such instances, alternative approaches may be employed provided that the overall minimum investment target is met. Investor-owned utilities, direct service industrial customers and public utilities as groups should allocate their investments according to Table 1, above.
3. Permits each distribution utility to determine how it collects revenues sufficient to meet this minimum standard

² Only a portion of the State of Montana falls within the region. This presents a unique situation that may require that state legislation enacted to implement the Steering Committee recommendations in Montana be structured differently.

in accordance with its existing regulatory structure, while recommending that allocations be based on cost of service standards.

4. Requires that utilities demonstrate compliance with the minimum investment standard on or before July 1, 1999, and annually thereafter. Individual publicly owned utilities should be provided the option of demonstrating compliance with the minimum investment standard “in the aggregate” by participating in collaborative/consortia efforts with other utilities. States should establish mechanisms to determine utility compliance with the minimum investment standard.
5. Authorizes the imposition of a non-bypassable, local distribution system access charge (meter fee) on customers served by any distribution utility that fails to demonstrate compliance with the minimum investment standard. This fee should collect revenue equivalent to that distribution utility’s minimum standard for annual investment in conservation, renewable resources and the provision of weatherization and energy-efficiency services for low-income consumers.

The Steering committee recommends that legislation establishing the minimum requirements set forth above should be implemented simultaneously with legislation implementing open retail access. The timing and details of the implementation of these recommendations should be directly linked to the timing and details of implementing the open retail access recommendations in the following section.

The Steering Committee is concerned that, due to competitive pressures, utility investments in conservation, renewable resources and low-income weatherization and energy-efficiency services are being reduced. To ensure a smooth transition and provide an early indication of potential problems, the Committee recommends that by July 1, 1997, each utility provide evidence that it will thereafter meet the minimum standard described above. Evidence could take the form of state statutes; tariff, rate or other filings; adoption of rate ordinances; budget resolutions by the utility’s governing board; or other affidavits that specify the funding level to be dedicated to these purposes. If utilities representing at least 90 percent of the regional end-use loads do not provide such evidence by July 1, 1997, then the Steering Committee recommends that the region seek federal backup to take effect July 1, 1999.

The Steering Committee makes no recommendations as to how individual utilities should collect the funds – whether through a charge based on volume of kilowatt-hours sold, through a distribution access charge that is independent of or less directly related to kilowatt-hour sales, or some other method. The Steering Committee believes that the region should rely on the appropriate regulatory bodies to establish methods of collection. However, the Steering Committee is mindful of the fact that how the charge is collected can have effects on both equity among customers and the competitive balance among different suppliers or fuels. The Committee is also aware that significant differences in how the charge is collected can alter the competitive balance among retail distribution systems. The Steering Committee believes that regulatory bodies will find it preferable to collect these charges in ways that do not distort competitive balance.

5. THE BONNEVILLE POWER ADMINISTRATION’S ENERGY-EFFICIENCY SERVICES

Due to controversy regarding the proposed scope of Bonneville’s Energy Services Business (ESB), Congress has asked the Comprehensive Review Steering Committee to address the competitive implications of ESB activities; the appropriate level of capitalization for these activities; and provisions to minimize cross-subsidies from power marketing and transmission revenues.

By way of background, Bonneville has proposed that its future energy-efficiency efforts be comprised of three elements:

6. Declining support for its historical (“legacy”) programs.
7. Support for regional market transformation efforts.
8. “Market development” activities designed to augment the market for energy-efficiency services, particularly in federal facilities and through bilateral contracts with its wholesale power customers.

Currently, these activities are grouped together as energy services. The first two activities are not at issue. The market

development activities have raised two primary concerns:

9. The original proposal for an Energy Services Business included a variety of activities that were perceived to put Bonneville in competition with private sector energy-efficiency business in a finite market.
10. Various parties were skeptical that the market development activities could be self-supporting, particularly to the extent that safeguards were put in place to prevent Bonneville from competing with private energy-efficiency providers.

To resolve the first of these concerns, Bonneville worked extensively with the Northwest Energy Efficiency Council (a trade organization representing energy-efficiency businesses) and other regional parties to develop principles that would focus Bonneville's market development activities on increasing the market for privately-delivered energy services, rather than competing in that market. In the following recommendations the Steering Committee expands upon those principles.

To respond to the second concern, the Committee proposes to limit Bonneville's net spending and capital borrowing during Fiscal Years 1997 - 2001 to levels substantially below Bonneville's October 31, 1996 proposal. The Committee has concerns about Bonneville's ability to control costs in the long run. However, the Steering Committee has neither the time nor the inclination to micro-manage Bonneville's staffing and accounting methodologies. Rather, the Committee proposes to resolve these concerns by putting tight limits on Bonneville's net expenditures on this activity.

2. Recommendations

11. Bonneville's energy-efficiency activities are not a "business." The purpose of these activities is to serve Bonneville's statutory directive to promote cost-effective energy-efficiency investments. The Committees consider it unlikely that these activities will completely recover their costs without unduly competing with private enterprises. To address concerns about the net cost of these activities, the Committee proposes borrowing and spending caps in items 11 and 12 below.
12. Bonneville's role in market development should be structured and managed to enlarge energy-efficiency markets beyond that which is being profitably captured by private business.
13. Bonneville's market development activities should be limited to markets or individual situations that are not currently accessible, viable, or profitable for the private sector energy-efficiency industry.
14. Bonneville's market development activities should be designed and implemented to take full advantage of private sector energy goods and services. These activities should not favor one competitor over another.
15. Bonneville will act primarily as a facilitator/aggregator of transactions for services provided by its partners.
16. Specific Bonneville market development activities will be discontinued when they become viable and profitable for the private sector energy-efficiency business.
17. An advisory board should be established immediately to monitor Bonneville's compliance with these restrictions. The advisory board should consist, among others, of private businesses that could be adversely affected by Bonneville's failure to comply with these restrictions, as well as power and transmission customers. Bonneville should consult with and report to this board at regular intervals, and the board should report concerns to the Northwest Power Planning Council.
18. Bonneville's market development activities should be limited to its regional power sales contact customers and federal agencies. Bonneville should provide energy-efficiency services for federal agencies in cooperation with the serving utility or when the serving utility cannot or elects not to provide those services itself.
19. Agencies and customers contracting for market development services should repay the full cost of those services, including repayment of loans at the appropriate U.S. Treasury rate.
20. Any Bonneville organizational unit or activity currently named "Energy Services" should be renamed "Energy Efficiency." This is intended to clarify that previous proposals to undertake a broad spectrum of other retail

Final Report of the Comprehensive Review of the Northwest Energy System

services have been dropped, and to preclude Bonneville support for load-building activities that are inconsistent with Bonneville's conservation directives.

21. Bonneville's use of U.S. Treasury capital should be limited to \$5 million per year and restricted to federal projects. This represents a reduction of roughly 50 percent relative to Bonneville's October 31, 1996 proposal, and a reduction of \$71 million relative to the final rate case figure. Capital borrowed from the U.S. Treasury should be repaid in full by the participating federal entity. All third party borrowing shall be non-recourse to Bonneville.
22. Bonneville's net costs for market development activities should not exceed \$8 million for the Fiscal Years 1997-2001. Bonneville's energy-efficiency activities should be self-supporting by September 30, 1999 or these activities should be terminated.
23. Bonneville should revise its October 1995 record of decision for firm non-requirements products and services contracts by replacing the "Energy Services" section with an "Energy-Efficiency" section that incorporates a final plan for energy-efficiency activities consistent with the restrictions herein. The energy-efficiency plan should not include activities listed in the original Record of Decision "Energy Services" section except those directly related to energy-efficiency. Other new activities listed in the original Record of Decision "Energy Services" section should not be offered by any part of Bonneville in competition with the private sector.

CONSUMER ACCESS TO THE COMPETITIVE MARKET – ENSURING THE BENEFITS OF COMPETITION FOR ALL

13. GOALS

The goals of the Comprehensive Review Steering Committee recommendations on retail markets and consumer choice are to encourage a more efficient power system, lower electricity costs, increased product choice and greater product innovation for all consumers. These goals were adopted subject to a commitment to maintain the reliability and safety of the electrical power system. The Steering Committee concluded that these goals could best be accomplished by putting in place a competitive electricity market driven by consumer choice. This section describes the background of facts and trends that led to this decision, then describes the recommended vision of a competitive retail electricity market driven by consumer choice, and finally lays out several steps that should be taken to accomplish a transition to this competitive market by July 1, 1999.

13. BACKGROUND

The Steering Committee's decisions about competition and consumer choice in retail electricity markets were made in the context of the changes already occurring in regulation, legislation, and electricity markets themselves. The changes that affect retail markets are more recent than the changes in wholesale markets, but they are a natural extension of those changes. The Federal Energy Regulatory Commission's Order 888 will force open wholesale markets for electric power, but it left decisions about retail electricity markets to the states.

During the past year, most states have initiated processes to address the question of retail competition. A variety of conclusions have been reached. Some states, such as California, have established schedules and passed legislation for moving to retail competition. Others, such as New Hampshire and Illinois, have developed pilot programs to test the feasibility of retail competition in electricity. Others have allowed retail wheeling rates for large consumers on a case-by-case basis. There is enough action at the state level on retail competition to establish a perception of tremendous momentum toward a more competitive retail electricity market. "It's inevitable," was a phrase heard often during the Comprehensive Review process.

In spite of the high level of state activity in this area, or perhaps because of the uneven progress by states, national legislation has been introduced to require retail competition in electricity markets nationwide. Colorado Representative Dan Schaefer introduced a bill entitled "The Electricity Consumers' Power to Choose Act". This bill would give all consumers the right to choose their electric service provider by December 2000. A similar bill, the "Electric Power Competition Act of 1996," has been introduced by Massachusetts Representative Edward Markey.

The strong momentum toward retail competition reflects the current feasibility of some large consumers acquiring their own electricity supplies in the wholesale market. Prices of wholesale power often are below the price industries are paying their local utility and the potential savings are an important factor in businesses' bottom lines. Large users are quick to point out that they buy almost nothing at retail except for electricity. Similarly, power marketers are anxious to provide power and services to large consumers. Both energy marketing companies and large users support more open retail power markets.

Opening up retail markets only to large users, however, is highly controversial and would, in all likelihood, limit the potential benefits that could be gained from more active competition. The major concern is that additional costs would fall on small captive customers as a result of large consumers acquiring their electricity elsewhere and leaving stranded costs behind. Without some agreement on how to recover stranded costs, there is a clear temptation to pass those costs on to captive customers.

The surest way to prevent shifting of costs to small captive customers is to free them to acquire their power supplies from alternative sources, just like the large consumers. When consumers have choice among electricity suppliers it is very difficult to subsidize other consumers at their expense. However, unlike the wholesale market, there is currently no well developed competitive retail electricity market. There are many important issues to be addressed and several technical problems to be solved before a widely available retail electricity market can be developed.

One of the major concerns raised is that of continued universal service at affordable prices. Reliable electricity supplies are a fundamental component of modern lifestyles and public safety. Some are concerned that few competitive electricity suppliers will come forth to serve small consumers, especially low-income consumers, at affordable rates. There may be increased need for consumer protection standards and information and education to help consumers make decisions about a product that is invisible, but essential to modern life. Some form of oversight may be needed to ensure a truly competitive retail market and to keep separate the regulated and competitive portions of the electricity system. In addition, more sophisticated billing and metering systems will be needed to keep track of the vastly increased number of participants in the market.

Some of these problems are best solved by allowing the market the opportunity to develop. Others require government intervention and oversight. The Steering Committee recommendation attempts to balance these two categories of need by allowing the market to develop while, at the same time, specifying solutions to important social concerns that arise with retail competition and setting an ambitious target to achieving full retail competition.

13. **RECOMMENDATION**

The Steering Committee recommends that beginning no later than July 1, 1999, all retail distribution utilities offer open retail market access for those customers that desire direct market access. The committee recognizes that states, regulatory agencies, or retail distribution utility governing bodies may authorize plans that provide a transition or phase-in to full retail market access. In these specific cases, that may result in a similar transition or phase-in of the full implementation of the public purpose recommendations that are linked to the open access recommendation.

Direct access may occur prior to July 1, 1999. However, it is recommended that in order to provide for direct retail access on the schedule in this report, several activities must be accomplished promptly. These include the identification of any stranded costs and, if any stranded costs are determined to exist, the creation of a stranded cost collection mechanism that does not cause cost shifting; resolution of any outstanding contractual issues; unbundling and cost-based pricing of electricity delivery services; pilot programs to explore aggregation for small commercial and residential consumers; the exploration of market index pricing options for residential and small commercial consumers; and implementation of public purposes funding, energy assistance funding and consumer protection mechanisms consistent with this report's recommendations.

The implications of this statement are far reaching. It will completely change the structure of the retail electricity market. It implies significant actions not only by utilities, but by state legislatures, regulators, and local governing boards of publicly-owned utilities. These recommendations are offered with the intent of aiding the appropriate regulatory bodies as they address these issues.

For consumers to have real choices in electricity supply, they must have unimpeded access to alternative electric service providers. Similarly, new energy service providers must have access to consumers through the local distribution system on a non-discriminatory basis with no advantage to the incumbent utility. The only way to effectively ensure these conditions are in place is to require division of the incumbent utility into two separate business lines; one a regulated electricity distribution utility and the other an electricity service company that competes on an equal basis with other energy service providers. The Steering Committee concluded that legal divestiture of the energy services component is not required, given that adequate regulatory safeguards are in place to assure independence of the two businesses. Some companies may find it advantageous to legally separate, but the Steering Committee recommendation does not require it.

13. **Electricity distribution utilities**

The electricity distribution utility formed by separating utility functions will be a regulated monopoly responsible for the safe and reliable delivery of electricity over the network of local distribution wires. This utility will have an obligation to connect any consumer to the electricity grid, but will not ultimately be responsible for acquiring the electricity that it delivers. The distribution utility will provide open and non-discriminatory access to the local distribution grid to any electricity supplier. The distribution utility may be the point of collection of funds to support public purposes, such as conservation, renewable resources, stranded cost recovery, and low-income weatherization and

bill support. Initially, the distribution utility may provide metering and billing services on an unbundled basis; that is, with the separate components of the electricity costs itemized. However, metering and billing may ultimately become a separate competitively provided service.

Electricity service companies

The remainder of the current retail electric utility, after separation from the distribution business, will compete with other electricity service providers to serve end-use consumers. This company will offer a variety of electricity products and services to consumers in an effort to win as many customers as possible, or as suits its business strategy. It may rebundle such separate products and services as bulk electricity supply, transmission, shaping to load patterns, maintenance of reserves, and distribution. The transmission and distribution would be acquired from the regulated utilities that provide such services, while the electricity generation, shaping and reserves may be bought in the competitive power generation markets or supplied from plants the company owns. The electricity service company will probably utilize various financial derivatives to provide risk mitigation services, such as fixed-price products. It may not have any defined service territory or be limited to only one line of business. It may offer natural gas, oil, energy-efficiency services, and even cable television along with its electricity products. Due to the nature of electricity, the electricity service company will probably be licensed by state or local authorities and be subject to consumer protection standards. The Steering Committee recommended that the Bonneville Power Administration, the region's federal power marketing agency, not compete in this competitive retail energy services business.

13. Policies for structuring competition

The Steering Committee developed a number of guidelines for state and local policy-makers to implement in order to be ready for retail competition by July 1, 1999. These were referred to as market maintenance procedures because they are intended to facilitate the efficient and fair operation of a competitive retail electricity market. Many of these guidelines are concerned with putting consistent requirements in place for all market participants.

13. Registration and licensing standards

Consistent registration or licensing standards should be established for all market participants sufficient to protect consumers and the delivery infrastructure from abuse. Regulators or local agencies should be equipped with the authority to correct abuses should they occur, by reviewing and revoking licenses or by assessing financial penalties.

All market participants serving residential and small commercial consumers should fall fully within the jurisdiction of state consumer protection laws and regulations. Consumer protection legislation and regulations should be adopted or applied to address issues including, but not limited to, credit terms, disconnection of service, standardized billing information, redlining and discriminatory pricing, unfair trade practices and fraud, service quality, and consumer privacy.

13. Electricity bills

Standardized information should be available on monthly bills, or other appropriate media, which would convey information about the provider's resource portfolio, environmental characteristics of that portfolio and a consumer satisfaction index. If itemized costs appear on consumer bills, disclosure should be complete, not partial. For example, charges for stranded cost recovery, transmission, distribution, low-income assistance, generation by type, demand-side management, and renewables should be included. Energy bills should include a place for the consumer to lodge complaints concerning service abuse. A neutral resolution mechanism for disputes between consumers and their energy service providers should be established within regulatory bodies or local agencies.

13. Balanced competition

Policies should be established to ensure that competition among established power providers and new market entrants is based on the value of services and products provided to the consumers and not on variations in the regulatory or market requirements faced by these categories of retail service providers. Consistency should be established among market participants in access to consumers, responsibilities for protection of consumers and for maintenance of a competitive

market (open access, service obligation, product labeling, etc.). To the degree possible, regionally consistent policies concerning meters charges should be established. Similarly, where the commercial transactions of established providers are taxed, the transactions of new entrants should be equally burdened.

Clarify regulatory authority

The restructuring of the retail electricity market will necessitate some changes to established government responsibilities relating to the electricity industry. The relationship between state or local utility regulatory agencies and state consumer protection agencies and laws needs to be clarified, or, if necessary, new institutions may need to be established. Responsibility for low-income assistance for electricity bills and the funding of that assistance needs to be decided. The relationship between federal regulatory authority and state and local regulatory authority to accomplish public policies (through the use of meters charges, local distribution charges, or other means) and to oversee the competitive market for retail services should be clarified.

13. Incentives for reliability and efficient use of local distribution systems

Distribution system charges will remain regulated to ensure reliability, efficiency and appropriate cost allocation. Local distribution and delivery services should be priced and regulated in a manner that fosters reliability and the efficient use and expansion of the facilities.

13. Transitional Steps

The Steering Committee identified a number of transitional steps that should be taken to help complete the development of a competitive retail market by July 1, 1999. State legislatures, regulators, local governing boards and utilities should begin to implement these steps as soon as possible. To the extent possible, decisions and actions by public policy makers during the transition should not create an advantage or impose a disadvantage on any group of competitors, nor preclude later actions to enable the development of efficient markets.

13. Unbundled billing

Consumers' electricity bills currently show one price for delivered electricity. The various components of the cost are not identified, that is, the components are bundled into one charge. These components may include, among others, bulk electricity supply, shaping services, reliability reserves, transmission, local distribution, and conservation program costs. Consumers will be better educated about electricity services and better prepared to make separate decisions about some of these products and services in the future if they begin to see the separate components on their bills now. Therefore, utilities should begin to unbundle, that is, itemize, the components of consumers bills for informational purposes in preparation for separate pricing in the future.

13. Separation of local distribution from electricity services

Utilities should reorganize their companies to functionally separate local distribution service from retail electricity services. Separate accounting systems should be developed in preparation for the side-by-side, but independent, existence of a regulated distribution utility and a competitive retail electricity service company. Full legal separation of the two functions is not required as long as regulators and local governing boards put in place the necessary safeguards to prevent utilities from using their monopoly positions in distribution to influence their market positions in the competitive electricity services business.

13. Provide open transmission system access as soon as possible

Utilities, working with their regulators or local governing boards, should provide open and non-discriminatory access to the local electricity distribution system as soon as possible. Utilities should develop open access tariffs for this purpose. Making such services available will help the competitive electricity services business develop and will provide early identification of any problems associated with operating in an open access retail market environment. The lessons learned will feed into the more formal restructuring process and help ensure its successful implementation.

13. Modify distribution utility service obligations

Most utilities currently have a regulatory obligation to *serve*, that is provide retail electricity services to all consumers in their service territory. In the market envisioned by the Steering Committee, such an obligation is inconsistent. Instead, the distribution utility should have an obligation to *connect* all consumers to the electricity services market through their distribution system. Neither the distribution utility, nor its affiliated electricity service company, will have any special obligation to provide electricity supplies and services to consumers in the restructured electricity market. Regulators and local governing boards need to alter the utility service obligation requirements to be consistent with a competitive electricity services market.

13. Promote development of retail electricity service providers

To effectively serve all types of consumers, it is important to gain experience in competitive retail electricity markets and to put in place conditions that encourage its development. In addition to the unbundling and open access tariffs described above, state legislatures and regulators are encouraged to establish an orderly transition to direct access to competitive retail electric service markets. An orderly transition would facilitate the market's development while ensuring that all consumer classes benefit and that unwarranted cost shifting is prevented. Particular concern exists for the small consumer. Pilot programs should be designed and implemented to encourage the development of aggregators who can provide competitively priced power for small consumers. States should recognize that effective competition may not materialize in all market segments. They should be prepared to consider alternative means to address this problem when it occurs, including, but not limited to, authorizing local units of government to aggregate small consumers.

A "green" power marketing program should be developed to introduce varied products to consumers and to provide an opportunity for renewable resources to compete in the retail electricity market based on their environmental characteristics and price.

Finally, a provider-of-last-resort mechanism should be maintained to accommodate those who cannot choose a supplier or for whom no suppliers materialize. Such a mechanism could include a last-resort supplier of energy at affordable rates, or could be a system of random assignment of electricity service providers to consumers who have not been able to effectively access the market.

13. Opportunity to recover stranded costs

Opening up the retail electricity market to competition raises the possibility that some utility costs become stranded; that is, a utility may not be able to recover the full costs of some previously rate-based assets. To the extent that stranded costs are a problem, utilities may resist competition and may attempt to shift stranded costs onto captive customers. To facilitate the transition and reduce cost shifting incentives, utilities should be given a fair opportunity to recover legitimate, non-mitigable stranded costs. Any policies on stranded cost recovery should preserve a strong incentive for utilities to mitigate stranded costs to the greatest extent possible. Recovery of non-mitigable stranded costs may be accomplished through exit fees or distribution access fees. However, it should be clear that stranded costs are transitional in nature and recovery provisions should be limited in duration and amount recovered.

TRANSMISSION – OPEN-ACCESS HIGHWAY FOR COMPETITION IN GENERATION

13. GOALS

The primary goal of the Steering Committee's recommendations for transmission is a transmission system whose structure and operation help ensure a fully competitive generation market. The recommendations are also designed to improve the efficiency of use of the transmission system and to maintain the system's reliability as the pressures of competition on utilities increase.

13. BACKGROUND

If consumers are to realize the benefits of competition in the generation of electricity, competitors in that market must have equal access to the transmission system. The Federal Energy Regulatory Commission (FERC) has recognized the critical importance of equal access, as demonstrated in its Orders 888 and 889, and has indicated that its policy goal for transmission is to facilitate a fully competitive wholesale market for generated electricity. The Steering Committee expects FERC to move ahead with the definition of rules to make sure that all competitors have non-discriminatory access to the transmission system.

If a single party owns both transmission and generation, there is potential for the owner to increase the profits of its generation by limiting transmission access to competitors. That owner is also subject to competitive pressures that may serve as a disincentive to needed investments in transmission maintenance and expansion. These pressures may also encourage operating on the edge of reliability limits. To ensure equal access and reliability requires that decisions affecting transmission be effectively separated from decisions affecting generation. The necessary separation can be accomplished by the formation of a FERC-regulated independent grid operator, or independent grid operator (referred to in the FERC Order 888 as an independent system operator, or ISO) that is responsible for the operation of the transmission assets of multiple owners. Operating and charging for the use of these systems as a single system would also eliminate "pancaking" of transmission rates (paying a different rate to each transmission owner over whose system a power transaction is scheduled) and make possible more efficient operation.

13. RECOMMENDATIONS

The Steering Committee recommends the formation of an independent grid operator, regulated by FERC and including the transmission assets of the Bonneville Power Administration and other owners of major transmission assets in the region. Membership should be voluntary, but every effort should be made to enlist wide participation.

13. Independent Grid Operator Responsibilities

The Northwest's independent grid operator should have operational control over the transmission system and enough operational control of generation to ensure short-term reliability. The independent grid operator will also have responsibilities in other areas, such as maintenance, planning and expansion. The independent grid operator should have clear incentives to maintain reliability and encourage the efficient use of the system. The independent grid operator will necessarily follow FERC principles for independent system operators, and may include modifications agreed to by participants and approved by FERC. Load control centers could be maintained locally, if participants prefer. The Steering Committee recommends that intermittent, as-available and distributed generation should be treated fairly in buying and selling necessary ancillary services and the provision of transmission services, and that transmission planning should follow long-term least-cost planning principles.

13. Bonneville Power Administration

Since Bonneville's transmission facilities make up a large part of the regional transmission system, these facilities

operational independence from Bonneville power marketing considerations is particularly important. Therefore, Bonneville's power marketing and transmission functions should be fully and legally separated (including separated funds). Bonneville's generation and transmission systems should be separated to promote competitive practices and to avoid the problem of self-dealing between the generation apparatus and the transmission system. This approach is consistent with the direction of federal energy restructuring policy being implemented around the country.

In addition, the Committee is aware that both generation and transmission are valuable federal assets and their revenues are currently collected for deposit in the Bonneville Power Administration Fund. Further, the Committee understands that the receipts to the Fund are now legally bound to meet Bonneville's financial obligations, which include payment of the Washington Public Power Supply System (WPPSS) bonds, other Bonneville financial obligations, and the agency's fish and wildlife mitigation and restoration requirements, as necessary. Accordingly, the Committee recommends that any separation of generation and transmission – whether by administrative or legislative means – be achieved in such a way that it does not jeopardize or diminish the legal obligation and ability of Bonneville to meet fish and wildlife and other obligations.

The resulting Bonneville Transmission Agency or Corporation should become a full participant in the independent grid operator. If other participants agree that the interests of the new Bonneville transmission entity have been sufficiently separated from the interests of power marketing, it could be the regional independent grid operator.

Legislation will be necessary to accomplish the separation of Bonneville's transmission and generation functions. Legislation should also subject Bonneville's transmission to FERC regulation that is equivalent to FERC regulation of investor-owned utilities.

13. Governance

The makeup of the independent grid operator governing board should follow FERC guidelines, which require that no individual market participant or class of market participants have the ability to control the independent grid operator. It could include owners and users, state and regional regulatory entities on an ex-officio basis (similar to the Northwest Regional Transmission Association and the Western Regional Transmission Association) and at least some independent outside representatives from the broader public, or it could be fully independent of owners and significant users.

13. Wheeling for Retail Loads

The independent grid operator, in providing wheeling for retail loads, would be governed by rules set out in FERC Order 888. These rules would allow such wheeling if it is authorized by the state or utility in which the retail load is located. The Steering Committee recommends that Bonneville honor the same rules until it becomes a participant in an independent grid operator.

13. Pricing of Transmission

Transmission pricing becomes increasingly important as the transmission system is used by more parties and transactions become more market-based. Some pricing practices used in the past would give users inappropriate signals for their use of transmission in the expected competitive environment of the future. Past pricing practices could also give inaccurate signals regarding the location of power resources and the expansion of transmission system capacity. These issues are being addressed by both the Northwest and Western Regional Transmission Associations. The Steering Committee recommends that pricing of services provided by the independent grid operator, which will be subject to FERC regulation, should follow principles being developed through the regional transmission associations.

13. TRANSITION ISSUES

During the period that the legislation is under consideration, Bonneville should move to accomplish as much separation of generation and transmission as is possible by administrative measures. In addition, Bonneville should participate in efforts to form an independent grid operator that could operate both federal and non-federal assets.

Final Report of the Comprehensive Review of the Northwest Energy System

An independent grid operator should assist in facilitating a competitive power market for customers that take delivery of their power requirements at sub-transmission voltages over facilities they currently do not own. In the transition to an independent grid operator, Bonneville should work with these customers to ensure that fair pricing mechanisms, reasonable transition periods and opportunities for utilities to gain control over delivery facilities are available.

FUTURE POWER SYSTEM ROLE FOR A FOUR-STATE REGIONAL BODY

13. BACKGROUND

When the Northwest Power Act was passed in 1980, the authors contemplated an extended period of electricity shortages. Many believed that the shortages could only be averted through the construction of increasingly costly, large-scale power plants. The participation of the federal Bonneville Power Administration was believed to be essential to the financing of these plants. As part of the bargain struck in return for this expansion of Bonneville's authority, the Northwest Power Act established the Northwest Power Planning Council. The Council, which is made up of two representatives of each of the governors of the states of Idaho, Montana, Oregon and Washington, was directed to further the following goals:

- To encourage conservation and efficiency in the use of electric power;
- To encourage the development of renewable resources;
- To assure the region of an adequate, efficient, economical and reliable power supply;
- To provide for the participation and consultation of the states, local governments, consumers, customers, users of the Columbia River system and the public at large in:
 - the development of regional plans and programs related to energy conservation, renewable resources and other resources, and protecting, mitigating and enhancing fish and wildlife resources;
 - facilitating the orderly planning of the region's power system;
 - providing environmental quality; and
 - the protection, mitigation and enhancement of the fish and wildlife, and their habitat, of the Columbia River Basin.

The Power Planning Council has been credited with many improvements in electricity planning. However, in a competitive environment, market forces will play the primary role in determining when and what generating resources are built and what can be charged for their output. In such an environment, Bonneville will no longer play a central and key role in resource development and the Northwest Power Planning Council's regional planning and oversight of Bonneville's resource acquisitions are no longer relevant.

— FUTURE ROLES

While the Council's power acquisition planning role is no longer relevant, the remaining goals of the Power Act are ones the Steering Committee believes are still important to the citizens of the region. The issue is how they are to be achieved in the context of a competitive market. The Steering Committee believes that moving to a competitive electricity industry can yield benefits and could, if properly structured, achieve many of those goals. There is, however, much that is unknown about the competitive future. How the transition to the competitive future is accomplished is of critical importance to achieving those goals and, more broadly, to the region's economic and environmental interests. As the Northwest moves toward a competitive electricity industry, there are roles that should be carried out by a regional body. These roles involve monitoring and analyzing the transition to a competitive market and informing regional policy-makers and the public. These roles are important if the transition is to be accomplished efficiently and fairly throughout the region and if the public values the Northwest has sought from its power system are to be protected. These roles do not include resource acquisition planning, regulation or implementation. After some period of development of the competitive market, certainly less than 10 years, the need for a continuing regional role should be re-evaluated. The transitional roles include the following:

— Conservation and Renewable Resources

The recommendation for conservation and renewable resources relies heavily and appropriately on local action to overcome market barriers. In some instances, such market barriers are uniquely local. In others, however, barriers cut across local boundaries. Consequently, there remains a need for an entity like the Council to identify the barriers and work with regional interests and others to devise mechanisms to overcome them. The Council or a regional entity like the Council should also be an active participant in the non-profit entity established to carry out market transformation for

conservation and renewables, both for its expertise and its unique regional perspective. The recommendation recognizes that there is value in providing guidance and suggesting standards for meeting the region's conservation and renewable resource goals. This is consistent with the Council's historic role and should be carried out by a regional body like the Council. Finally, the recommendation also recognizes the need for tracking and reporting progress regionwide. A regional body like the Council, working with power suppliers, industry, governments and public interest representatives in the context of the Regional Technical Forum recommended in an earlier chapter, is an appropriate way to accomplish these tasks.

— **The Competitive Marketplace**

Competition will create a regional, and probably Westwide, electricity market. While an individual utility approach will remain important for regulation of the distribution function, much of the market activity will occur across utility and across state boundaries. There will be many new non-utility and non-regulated actors in this market. In addition, differences in market structure and rules among and within states can result in market friction and create opportunities for market participants to arbitrage these differences to the detriment of consumers and overall market efficiency. The development of the market should be monitored for potential problems of market power or structural market inefficiencies until the new structure is mature. Carrying out this monitoring, promoting information sharing and coordinating resolution of multistate issues is an appropriate role for a four-state regional body like the Council.

Included in this role is the need for some level of continued regional review of the Bonneville Power Administration. This recommendation should result in a less aggressive market role for Bonneville. Bonneville's administrator will, however, continue to have a great deal of discretion. While Bonneville is in a position to exercise significant market power, regional review of Bonneville and its market role is important.

Efficient functioning of the electricity market depends in large part on access to relevant information by all market participants. The Steering Committee is confident that as the market matures, mechanisms will develop to provide that information broadly. During the transition, however, access to such information is likely to be uneven. It would be desirable to have a regional body that provides information, evaluation and analysis relevant to the evolving marketplace to help the development of full, fair and effective competition throughout the region.

Efficient functioning of the competitive electricity market also depends on the efficient operation and expansion of the regional transmission system. As open access is put in place through the work of the regional transmission associations and during the creation and early operation of an independent grid operator, the Council's overall regional perspective will help to keep the transition on track toward its goal of an efficient market.

Finally, the competitive market has uncertain implications for the quality of our environment. For example, some are predicting significant increases in emissions as a result of competition. The effect of the competitive electricity market on key environmental indicators needs to be monitored and evaluated and, if necessary, policy-makers assisted in developing market-oriented corrective mechanisms. Although the Council should have no regulatory responsibility in this area, monitoring, analyzing and working with policy-makers are appropriate roles.

— **Public Participation and Involvement**

One of the primary charges given the Northwest Power Planning Council under the Northwest Power Act was to facilitate public participation and involvement on issues related to electricity and fish and wildlife in the region. The Council has attempted to fulfill this charge by maintaining an extensive public information and public outreach program, both through its central offices and its offices in each of the Northwest states. In some respects, the competitive market will give consumers a much greater say in the electricity industry than they have had before. Nonetheless, a four-state body with the ability to inform and involve interested members of the public on matters that affect them, their environment and their economy across the region will continue to be of value.

— **FUNDING**

The funding of the Northwest Power Planning Council has been through a charge on Bonneville Power Administration power rates. If federal legislation affecting the role of the Northwest Power Planning Council is pursued, the question of

the level and sources of the Council's funding should be addressed.

APPENDIX A: DISSENTING OPINION

APPENDIX B: MEMBERS OF THE STEERING COMMITTEE

Q:\DW\WW\COMPRVW\FNL RPT.DOC

² Retail distribution utilities may dedicate their share of these funds to acquiring renewable resources through locally initiated programs.